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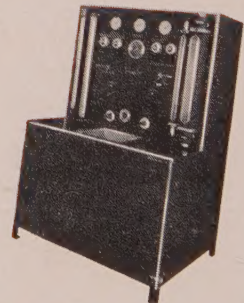
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QUIZ

ON AERONAUTICAL ENGINEERING EDUCATION

Here are typical questions asked by men considering careers in Aeronautical Engineering. Men who realize the great opportunities in this field ask such questions in an earnest desire to weigh their qualifications. Perhaps you are at the stage of "thinking about" Aeronautical Engineering. It is for men like you that Northrop Aeronautical Institute presents these questions and answers. We trust the answers will be helpful, and shall be glad to go beyond them by replying promptly to any personal inquiry.

AGE

- Q.** My age is 25. Am I too old to take up training in Aeronautical Engineering?
- A.** No. The average age of men enrolled in Northrop Aeronautical Institute is 24-plus. Some have entered directly from high school. Others have entered after long periods in the armed forces, their ages extending up into the middle thirties. Age is of little importance—educational qualification and personal determination to succeed are the essential factors.

EDUCATION

- Q.** I am a high school graduate with only two years of mathematics. Am I qualified educationally for your Aeronautical Engineering courses?
- A.** Yes. Our entrance requirements conform to the standards prescribed by the National Council of Technical Schools, which specify satisfactory completion of a 4-year high school course, or its equivalent. In many cases, practical training and experience—particularly in the armed forces—take the place of a more formal education.

SERVICE EXPERIENCE

- Q.** I was in the service 46 months. Is this experience of any general or specific value to me?
- A.** To give an exact answer we should have full information on training and duties. Many types of training and experience in the service give a student an aptitude for grasping technical subjects. Also, we have observed that a service background gives a man a sense of responsibility that leads him to strive for success in his studies.

AIR SERVICE EXPERIENCE

- Q.** I was in the Air Force, first as a mechanic, then as a fighter pilot. Will this experience help me in studying to be an aeronautical engineer?
- A.** All types of air crew and ground crew experience contribute greatly to grasping aeronautical engineering subjects, and to becoming a better engineer. Knowledge of aircraft structural details, maintenance problems, performance, design, and flight characteristics helps the student make practical interpretations of his daily study and apply practical considerations in his assignments.

DIFFICULTY OF TRAINING

- Q.** I know I would like an Aeronautical Engineering career but I am afraid the course of training might be too "tough" for me. What do you advise?
- A.** That depends upon the strength of your desire for a career and your determination to succeed. If a man has the proper educational qualifications he can take up an Aeronautical Engineering course with confidence. Our training program carries the student steadily forward from his basic qualifications.

LENGTH OF TRAINING

- Q.** Is it actually possible to get a thorough training in Aeronautical Engineering in a 2-year course?
- A.** A longer school day, year 'round training, and elimination of non-essential subjects are advantageous features of our training program. In our 2-year course there are more engineering subject hours than one would normally obtain in a 4-year college curriculum. In addition, the training is in actual industry methods and prepares a man to step directly into practical engineering assignments.

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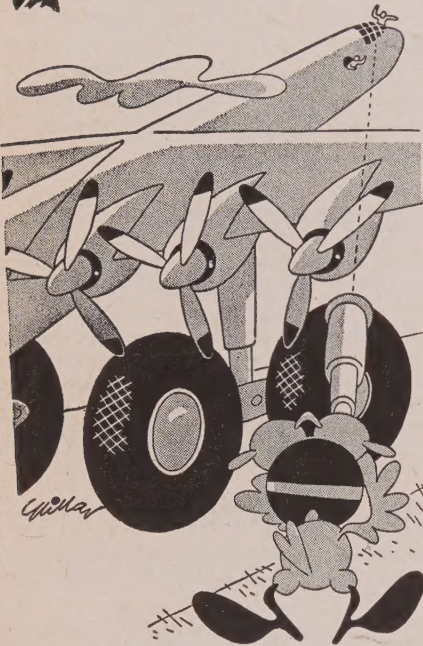
AERONAUTICAL INSTITUTE

1521 EAST BROADWAY
HAWTHORNE, CALIFORNIA

TRAINING OF MEN FOR CAREERS IN AVIATION

The Birdmen's Perch

By *Major Al Williams*, ALIAS, "TATTERED WING TIPS,"
Gulf Aviation Products Manager, Gulf Bldg., Pittsburgh 30, Pa.



It gives us the creeps!

The super-super-super B-36, we mean.

You've probably heard how this monster is so big that engines are sprinkled out over her wings like confetti . . . how her wheels are a couple of feet higher than you are . . . how she's big enough to fly anywhere in the world without refueling, etc.

Large airplane, see?

And guess what bothers the test crew?

Altitude, that's what!

Not in the air, mind you—on the ground. Because, when they gun this gal down the runway, her unusual, nose-high take-off attitude puts the cockpit 50 feet in the air before the wheels leave the ground!



WE CLEANED THIS UP!

We got back to our desk for the first time in days, this A.M.

It was a mess!

We cleaned it up enough to work on, but not clean enough to work at *full efficiency*. Our secretary showed, and *really* cleaned up! We started to get *twice* as much work done.

Which reminded us that regular refining methods clean up a crude oil enough to lubricate, but do not clean enough carbon-and-sludge formers from it to lubricate at *full efficiency*! There's still enough of the non-lubricating trouble stuff left in the poorer grades of oil to give your engine a dirty deal, literally and figuratively!

But in case you've forgotten (since last month) Gulf uses an extra step . . . an additional refining stage in the manufacture of Gulfpride Oil.

This extra step performs the same function on already refined oil that our secretary performed on our already "cleaned" desk—it gets *more* of the "mess," the non-lubricating impurities out of Gulfpride Oil!

And you get *full lubrication efficiency* when you feed Gulfpride to that lucky engine of yours!

LITTLE KNOWN FACTS

"In 3 hours of normal cruising, a B-24 passes air through its carburetors, weighing more than the airplane!"

That's from Lt. John Newberry of Riverton, Wyoming.

"150 air traffic controllers in Brazilian traffic control centers are able to handle the airways in the English language for the benefit of English-speaking pilots!"

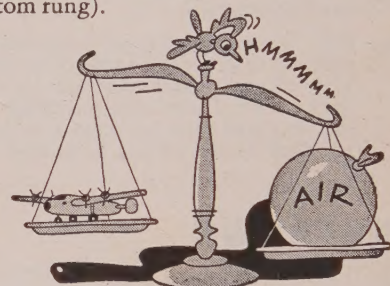
What's more:

"Major Al Williams, being a pilot (honest, fellas! Ed.) should not be ad-

dressed as 'Senhor,' but as 'Major Aviator' or 'Maj. Av.!'!"

That pair's from Robert C. Ewing, Sao Paulo, Brazil, our *second* Brazilian Perch Pilot (br), and a double one at that!

See . . . the idea is that you stumble across a Little Known Fact About Well Known Planes. Then you send it to us at the address on the top of the page. And, if it's good enough to print here (*and if it's accompanied with proof!*), why, we send you a commission as a Perch Pilot (bottom rung).



And if you repeat, why, we send you another commission, until pretty soon you've got 5 of them—at which time you are promoted to Senior Perch Pilot.

If you're super-super wonderful, some day you may get 20—count 'em, 20—"Facts" in, at which time you'll be made a Command Perch Pilot!

We may even turn the Perch over to you.

Or Flutter, the Oily Boid.

Gulf Oil Corporation and Gulf Refining Company...makers of



- ▶ An old friend of ours has a brand-new name and insignia—and besides, it's his 20th Anniversary!
- ▶ So congratulations PCA on your new name, "Capital Airlines" . . . on being 20 years old, and on using Gulf Aviation Products for nearly 15 of those years!

SKYWAYS

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J. FRED HENRY		Editor and Publisher	
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There are two Skyways: English and Spanish

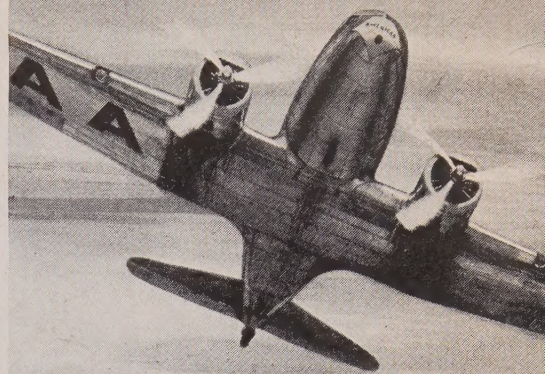
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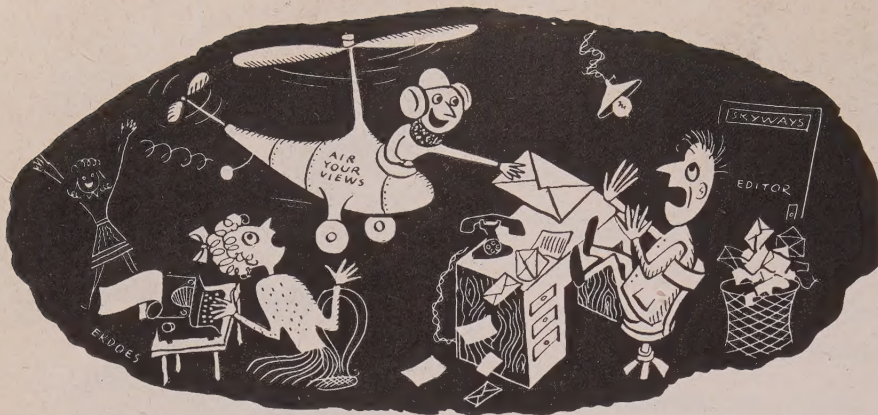
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AIR YOUR VIEWS

Where To Glide?

Gentlemen:

Johnnie Robinson's article in the February SKYWAYS caught my interest, and now I want to try gliding too. Can you tell me if there are any glider schools near San Francisco?

ELIZABETH JONES

Daly City, California

For information on the location of glider schools and glider fields, write to the Soaring Society of America, P. O. Box 71, Elmira, New York.—Ed.

Control By Ramjet?

Dear Sirs:

I have been an avid reader of SKYWAYS for many years and like it very much. I am both a licensed mechanic and a pilot.

Needless to say, I have followed the progress made toward crashing the sonic barrier with a great deal of interest. It has occurred to me that possibly a system of ramjets, or other form of jet power, might be synchronized with the present control systems to give, through their reaction, control when present systems become ineffective.

PAUL M. CUTTING

E. Greenwich, Rhode Island

We don't know enough yet as to just why aircraft in the transonic range of speed lose their control through oscillation and other phenomena. But, as it looks now, it is not for lack of power. Cutting in the ramjets might increase the speed, but as far as we know now, that would not help regain control, and it might make it worse!—Ed.

For The Defense

Gentlemen:

I should personally like to meet this Mr. Downie ("Puddlejumpers are More Fun," January SKYWAYS) on a strictly business basis. I believe in "live and let live" and I thought his article was very interesting . . . up until the part that read ". . . And there isn't a control tower operator always yapping at you."

No matter who or what he is, a control tower operator always is "yapping." Even if we are telling the pilot that his tail assembly is aflame, we're still "yapping." Even if we're telling him that a ship is making an emergency landing directly overhead, we're "yapping." I fail to see how such vital information as wind direction or velocity can be termed idle talk.

This business about "How much can a pilot actually learn about flying by listening half-heartedly to a radio range?" Tell Mr. Downie to check his CAA manual. A radio range isn't meant for instructional purposes. That's where the Link Trainer for basic radio instruction comes in, Mr. Downie, remember?

That far-from-complimentary crack about having to taxi to heaven-knows-where before take-off is a lot of garbled propwash, too. It depends on the direction of the wind, runway in use, etc. This is just in case you find yourself taxiing head-on into a landing airplane.

Have I said enough? My apologies, gentlemen. You know we CTO's are a touchy lot.

MARY LETSIS

Athens, Ohio

And so continues the endless battle between pilots and CTO's. Far be it from us to encourage such intramural sniping; we just believe both sides should be given a hearing. The sooner we all get together to boost aviation in general and as a whole, the more effectively we will be able to smooth out our own particular paths.—Ed.

Facts And Figgers

Dear Sirs:

Can you tell me which airlines have the greatest number of planes, personnel, passenger miles, and route miles?

CHARLES WALTERS

San Diego, California

Following is a comparative list of leading airlines' statistics.

Airline	Planes	Per- sonnel	Route miles	Rev. Pass. Mi.
American	128	13,996	11,463	1,334,769,491
United	95	11,735	11,397	1,100,004,687
TWA	86	16,000	8,668	773,851,610
Eastern	72	6,300	8,055	832,478,282
Pan American. 90	12,200	100,635	682,347,000	

Pan American, of course, is an overseas carrier, while the figures given on the others are domestic.—Ed.

Glider Pilot Talks Back

Gentlemen:

The other day I read Johnnie Robinson's article "Power Pilots are Second Best" in the February SKYWAYS. My reaction toward it was that of great disappointment in Johnnie's sense of ethics. The article does immeasurable harm to gliding, coming from a National Soaring Champion, insofar as it not only slights the power-plane pilots, but is also extremely one-sided in its conclusions. For a number of years we have been trying to sell gliding and soaring to the people, and hoping to win the power-plane pilots to our side. Now that we are at last slowly succeeding in doing so, these men and women are being rudely slapped without any particular rhyme or reason.

It hurts me to admit it, but a number of people in gliding are trying to make of it what aviation was trying to do 15 years ago, a "Desperate Dalton" occupation, the membership of which was supposedly composed of some special

brand of human being. That is a lot of bunk.

What John says about power-plane pilots, I, as a glider pilot, can say about the motorless boys. I know of a glider pilot with 300 glider flights to his credit who could not be soloed in a lightplane after 8 hours of dual. Glider pilots have two bad habits hard to break: sharp pull-ups on take-off, and wheel landings. Most of our students at the Sanford, Florida, school are power men, and do a swell job of flying the gliders after a short course. A friend of mine took up a power-plane pilot in his two-place sailplane some time ago and let him fly the ship. This pilot hadn't flown for several years; despite this, he flew the sailplane better than any glider pilot as far as coordination and landing pattern was concerned. That is another cardinal sin among glider pilots—sloppy patterns, and boy are they sloppy! And talking about coordination, what's so mysterious or difficult about it? I do not agree with Robinson that all gliders require more rudder than power planes.

As far as Johnnie's crack about the C-47 pilot's lack of navigation is concerned, let me make this statement: Glider pilots can not navigate worth a damn themselves, unless they have previous power-plane experience. It is hard to read a map, check your compass and the ground below, and concentrate on flying the sailplane all at the same time. Only a few have trim tabs and can be trimmed to fly hands-off.

And speaking of short landings, Johnnie should talk to some C-47 pilots who flew on the Pacific front. They took off and landed with overloaded aircraft on small strips surrounded by mountains, from which you or I would hesitate to fly a lightplane. My suggestion to John is that instead of bragging that he has never soloed a light plane, he learn to fly one!

ALEXIS DAWYDOFF

Long Island City, N. Y.

A fine evaluation, Mr. Dawydoff, and coming from you, we can appreciate its objective approach. You have said, substantially, what several other readers wrote us.—Ed.

Not So Big

Dear Sirs:

Herewith is my claim to being the biggest pilot in the country. I weigh 305 pounds, and am six feet three and a half inches tall.

E. H. McADAMS

Quaker Hill, Connecticut

You still will have to eat a lot of potatoes to beat 319-pound Will Hardy (see April "Air Your Views") whose picture appears below. You do, however, take second place, Mr. McAdams, so far. Paul Menser's entry, KWK announcer Ed Wilson, of St. Louis, Missouri, takes third place at 300, while Melburn Holland's bet, Tom Stamey of Altus, Oklahoma, and Harold Burton of Howell, Tennessee, weigh in at 295 each for fourth-place tie. Eat up, boys!—Ed.

WILL HARDY tips scale at 319 pounds





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FOR NAVIGATIONAL AIDS TO AIRLINES

AN EDITORIAL

THE Interim Report of the Committee on Interstate and Foreign Commerce of the Senate on its investigation of air safety is a very real step in the right direction. Public reaction to air carrier accidents during the past winter at last has shocked the Congress out of its long apathy.

The subcommittee, headed by Senator Owen Brewster (R. Maine), heard an impressive group of witnesses from all the agencies concerned with air operations, both civil and military, and its conclusions, together with those of the Preliminary Report of the Committee on Interstate and Foreign Commerce of the House of Representatives which made its own investigation, will, it is hoped, bring immediate action by Congress.

"The evidence before the subcommittee indicated," Senator Brewster stated, "that transportation by air on domestic American flag lines is among the safest forms of travel available. The committee further recognizes the dramatic nature and the news value of airplane accidents. The psychological impact of an air crash, whether or not it may occur in the United States, has an adverse effect of critical proportion on the public acceptance of safety in air travel. (We) wish to commend the domestic scheduled-airline operators for their outstanding safety record. However, to eliminate *all* air crashes, if humanly possible, the committee now extends its recommendations to include mechanical and electronic devices as safety factors."

The House Committee states further that "air safety is obviously a combination of: a) proper equipment properly maintained; b) pilot skill, intelligence and psychology; c) skillful dispatching and adequate flight control; d) adequate airway and airport facilities; e) adequate weather forecasting and reporting."

Both committees agree that the Civil Aeronautics Administration should proceed as rapidly as possible with installation of all known aids that have been proved to be the best available, irrespective of cost, at the principal existing airports, rather than spend money not yet allocated under the Airport Act for additional funds.

In addition, it "registered concern" over the tendency on the part of government in recent years to curtail CAA research appropriations and urged Congress to get the real facts rather than let government bureaus fail to argue their cases after the Bureau of the Budget has made cuts in their requests. Overall recommendations, made by both Senate and House committees, were for immediate provision of necessary funds for the following:

- 1—High intensity approach and runway lights, fog dispersal systems (FIDO), multiple runways, etc.
- 2—Electronics-instrument-landing system (ILS), radar ground controlled approach (GCA), surveillance radar.
- 3—Very high frequency (VHF) radio ranges and communications, and omnidirectional ranges which can be used

by electronic distance-measuring equipment.

- 4—Air traffic control, coupling the use of the present system of radio-telegraph, telephone and ground lines and the additional use of surveillance radar and the automatic posting board.

"Theoretical progress," said the committee, "should be immediately translated into effective action. There has been too much delay in adapting wartime developments to commercial and private flying. Differences of opinion by the Government agencies charged with the development and promotion of air safety and those who would use those facilities have contributed to this delay. There has been a tendency to wait too long before adopting currently proved devices as standard in the hope that better ones would be developed. This policy can no longer be tolerated. Use should be made of what we now have."

The Air Transportation Association has estimated that cost of the desired equipment for 160 airports, including 10 FIDO sets would be \$38,500,000, and that these installations would result in more than 90 per cent of commercial air traffic being able to operate safely under all weather conditions, given also proper traffic controls. CAA estimates cover 166 fields for ILS, GCA at 30 fields, high-intensity approach and runway lights at 166, FIDO at one (experimental), and tower surveillance radar at 140 fields would cost \$54,540,000. It has on hand \$11,801,000 from current appropriations and the President's 1948 program.

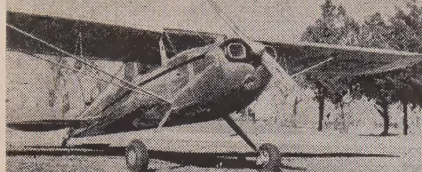
However, of the \$45,000,000 appropriated by the 79th Congress for the Federal Airport Program, \$42,750,000 was for airport projects in the States and Territories, the balance (5 per cent) being for administrative expenses. None of the project funds have been expended so far and the Senate Committee recommended that Congress reconsider its use, on the basis that: "There is much to be said for adequately equipping existing airports to serve the safety of the traveling public before adding to the hazards by building more airports."

There will unquestionably be a great howl from all parts of the country, and much political pressure applied to Congress by communities where airport projects are already committed under CAA plans. It can, of course, allow the commitments to stand and appropriate the additional \$54,540,000 as a separate fund, but in view of the economy drive, this seems unlikely. The dilemma is a very pretty one.

SKYWAYS, at this point, agrees with Senator Brewster's subcommittee and its recommendation that existing funds be used immediately so that installations can be made for the winter of 1947-1948. As badly as new airports are needed—and most of the projects assigned are for the personal-plane type fields—it is better medicine for aviation to grow a little more slowly and do it the safe way.—J. FRED HENRY



SKYWAYS



Right on the nose of the new CESSNA

THERE she stands, ready for the take off, the smart new Cessna 140 with shiny metal fuselage and new type landing gear. And right on the nose, giving more "pull" to every horsepower, is a Sensenich propeller. Very likely your post-war personal plane—no matter what its make—will be Sensenich-equipped. For among those who design aircraft as well as those who fly them, no other propeller is chosen so often by so many.

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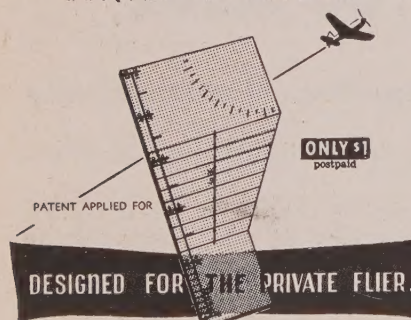
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REASON 1—You can start your training NOW at California Flyers

The re-opening of famous California Flyers School of Aeronautics has temporarily relieved the critical shortage of aviation training facilities. It means a *limited number* of young men can start their aviation career training at once. This situation is, of course, temporary and must be taken advantage of *immediately*. California Flyers—like other major aviation schools—will soon be filled to capacity.

REASON 2—You get credit for your military mechanic's experience at California Flyers

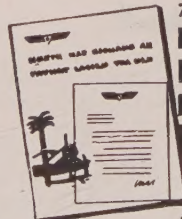
An important feature to students with previous mechanic's experience is California Flyers' policy whereby scholastic credit is allowed for this experience. This credit is extended as the student demonstrates his ability to make progress throughout his training and to the limits allowed by the C.A.A.

REASON 3—A unique training system permits the ambitious student to advance faster

California Flyers' *Participation-Group Instruction* places emphasis on small classes and individual training. Under this system the student obtains the maximum amount of training in the shortest possible time.

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Founded in 1930, California Flyers is one of the oldest, most highly respected aeronautical institutions in the country. Before the war it trained hundreds of young men, and today its graduates are in responsible, high-salaried positions all over the world.



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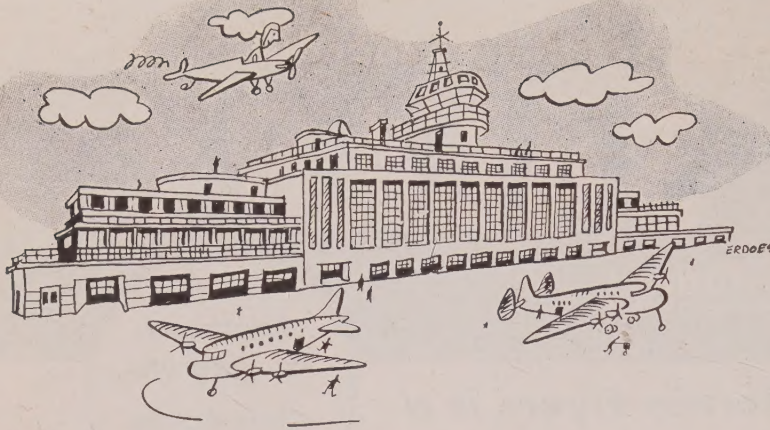
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WASHINGTON NEWS

BY ALICE ROGERS HAGER

A CLEAR, intelligent and implemented policy on aviation development in the U. S. has never been so crucially needed as it is at the present time. To say that it is long overdue is only to repeat what this column has stressed since before VE day.

The situation closely resembles our blindness in other years when we destroyed our national resources in forests, minerals and grazing lands with a wasteful recklessness that ended in tragedies such as the Dust Bowl. It is repetition—but *necessary* repetition—to point out again that we ended the war with the greatest aviation plant and potential in the world, with a supreme air force, an equally supreme manufacturing industry, research equipment and organization which could have kept leadership in our hands, air bases round the globe, communications established on all the overseas routes, airlines second to none, and a personal aircraft industry which could have produced planes and pilots for the unstinted growth of civilian flying that would give the sound base of the entire pyramid.

The public was eager to fly. Thousands stormed the airlines for tickets; thousands bought war surplus lightplanes because new craft were not available. Orders piled up in the offices of the personal aircraft producers. It looked as if the boom of all time was here to stay. Today, a scant two years later, aviation is in the most critical state in its history. Congress, panicked by recent crashes, is blaming everybody but itself. It failed lamentably to establish the over-all policy needed and to produce the funds to pay for it. The industry failed as badly in lack of cohesive action. CAA fought the battle of ILS vs. GCA systems and is still in the throes of that battle. The public got tired of waiting for the airlines to develop reliable service and has been scared by the unfavorable publicity given the crashes. Prices on personal planes stayed so high that buyer resistance finally developed.

These are harsh words, but, like surgery under certain conditions, imperative. No real friend of aviation can keep still at this point. The public welfare is involved. The Interstate and Foreign Commerce Committee has at last moved to gain legislation which would

establish for the Air Coordinating Committee statutory powers to guide development, instead of trying for a new Morrow Board, which former Senator Hugh Mitchell proposed in the last session. Both W. A. Patterson, president of United Air Lines, and C. Bedell Monro, president of Capital Airlines, have issued important analyses of what is wrong with air transport. Monro pulled no punches. "Our commercial air transport," he said, "is in the most critical period of its history. . . . You need today to make no reservations for flights . . . you can get a ticket on the next plane for any city in the country or the world. In spite of an outstanding record of safety, we didn't tell the public about it until air crashes . . . had caused considerable concern."

He and W. A. Patterson both saw good days ahead but Monro emphasized that there must be partnership between Congress, the industry and the people to produce the desired results.

Change over from the Provisional International Civil Aviation Organization to the permanent one is expected to take place in May, with member nations having agreed to simultaneous deposit of ratification agreements in March.

Dr. Jerome Hunsaker, NACA chairman, has sent a report to the President and Congress emphasizing the end of an era in aviation. "In its present form," he says, "the airplane is no longer a sound basis for future planning for national defense. Practical flight at speeds now possible requires the application of new knowledge which must be obtained by diligent research with new tools and new methods. As with the Wright brothers at the first flight, we stand at a new frontier where research to establish the scientific principles and laws governing high-speed flight will determine our future in the air." Most important announced discovery in the report is the feasibility of the ramjet en-

gine, established in wind tunnel tests for altitudes up to 47,000 feet and speeds up to mach number 1.84. Possibility of man-carrying supersonic flight with present gas turbine and ramjet engines up to about 1,100 mph was cautiously admitted.



Aviation has lost one of its greatest and most colorful figures in the death of "Tex" Rankin. He was not only an airman in two wars and the outstanding acrobatic flyer, but a great human being. His creed was in his words, expressed when he was trying to get to the Pacific as a combat pilot: "Lots of people have the wrong idea about aviation. I want to prove that flying—even combat flying—isn't just a young man's business."



Another "oldster," with the same creed is Washington's flying doctor, William C. Stirling. An eminent surgeon, Dr. Stirling believes flying is a "wonderful outlet, good remedy for taut nerves." Fifty-two years young, he tells anyone who will listen that "straight flying is the safest and best means of transportation and acrobatics the biggest thrill on earth. (They) refresh both mind and body." The doc started to fly when one of his patients, who was 74, told him it was great stuff. He now has over 200 hours in the air.



United Air Lines has bought a Sikorsky S-51 helicopter, the first airline to do so, and has filed application with the CAB for airmail routes serving 32 communities in the Chicago area. It expects to follow this with further requests at other key points coast to coast, and extend them to passenger carrying. The company believes this is a logical move to extend air transportation to hundreds of off-line towns which can feed into the carrier's system.



Experiments by the U. S. Department of Agriculture Forest Service and Bureau of Entomology and Plant Quarantine offer new revenue opportunities for contract and airport operators. A deficiency appropriation of \$390,000 has been asked of Congress as the Federal share of a \$590,000 project to dust DDT by air over 350,000 acres of insect-infested Idaho forests. If granted, the project will start in May. The Forest Service hopes to do such dusting in all parts of the country later, and the Department is at present studying possibilities of seeding grass and trees by air.

Pilot Notes

According to recent information, insurance rates are 3 per cent less for those plane owners whose ships are equipped with a stall warning device.

'Copter Info

Special rules governing use of helicopters have been proposed as new amendments to Part 60, Air Traffic Rules.



SKYWAYS

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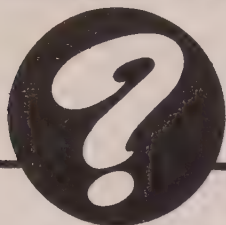
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SINCE 1929...ON OUR OWN HUGE AIRPORT—IN HEART OF THE AIRCRAFT INDUSTRY.

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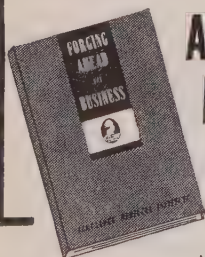


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PROP WASH

Aero Oddities

What Now? From her back porch, an elderly Maryland woman watched a *Cub* battle a very stiff headwind; immediately phoned Congressional Airport Owner Arthur Hyde to report, "plane stuck overhead, motor stopped, can't come down, what are you going to do about it?" (T. Hennessy, Jr., Garrett Park, Maryland)

Aerial Surveyor. Fifty-year-old T. J. Plummer, house mover from Ogallala, Nebraska, recently bought a *Cub*; will use it to check location and size of houses to be moved, best route to move them on.

Private Air Force. Dallas oil man H. W. Snowden recently bought airplanes by the acre (450 acres) . . . 850 basic trainers and a twin-engine Cessna. (H. M. Holm, Abilene, Texas)

Aero Fact. Propeller tips of lightplanes (Aeronca, Piper, T-craft) travel approximately 450 miles in one hour at normal cruising rpm. (H. G. French, Grand Rapids, Michigan)

Rubbing It In. South Plainfield, N. J., police headquarters heard too much hangar flying from Student pilot-Patrolman Norman B. Schuyler; presented him with a plumber's plunger to use as plane's stick when he "explains flying details to fellow officers." (D. E. Hunt, New Brunswick, N. J.)

S'no Stymie. When winter snow held up delivery of milk to dairy in Shiawassee County (Michigan), former Army pilot Bud Schultz of Owosso flew his Aeronca to farms, picked up cans of milk, flew them back to the dairy. (A. R. Saureel, Perry, Michigan)

On The Nose. Thunderstorms make needle on Automatic Range Finder swing all over dial. Lightning flash pulls needle in direction of lightning's

origin. But, after one of these flashes, needle returns to position that is most accurate and infallibly correct. (T. E. McArthur, M.D., Atlanta, Georgia)

Still Shooting. Capt. Chester Bohart, B-29 pilot at Roswell, New Mexico, thought shooting was over, now doesn't know. Taxiing off runway, discovered tire going flat; found Indian arrow-head punctured tire. (H. Helfer, Arlington, Virginia)

Solo Fright. Officials arrested Dayton, Ohio, man for stealing plane, flying it to Fort Wayne, Indiana; discovered it was thief's first time in an airplane.

Endurance Flight. Navy airship XM-1, with crew of 13, set endurance-without-refueling record. Ship stayed in air more than 7 days, 2 hours; landed at NAF Glynco, Georgia, with 200 gallons of fuel in tanks. XM-1 exceeded by one day, 16 hours record set by Russian airship in 1936. XM-1 consumed 13 gallons fuel per hour. (L. Ray, Jr., Tulsa, Oklahoma)

Prop Wash. Burlington, N. C., bread-truck driver used to park truck on highway at end of runway to watch planes take off. DC-3 took off directly over truckman's head; prop wash blew load of bread off truck and down the highway. Driver hasn't parked by airport since. (B. Anthony, Burlington, North Carolina)

Att'n Readers:

PROP WASH is your column. If you have any news-note oddities pertaining to aviation, send them to SKYWAYS, Prop Wash Editor, 444 Madison Avenue, New York 22, N. Y. Five dollars will be paid the sender of each "oddy" printed on Prop Wash page. In cases of duplication, the Prop Wash contribution first received at the office of the editor will be honored. Contributions cannot be returned unless they are accompanied by stamped addressed envelope. Decision of the editors is final.

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- Built-in power supply for both. All in a handsome unit 6 $\frac{3}{4}$ " deep, 6 $\frac{3}{4}$ " wide and 5 $\frac{1}{8}$ " high; weighing only 8 pounds complete with shockmount!

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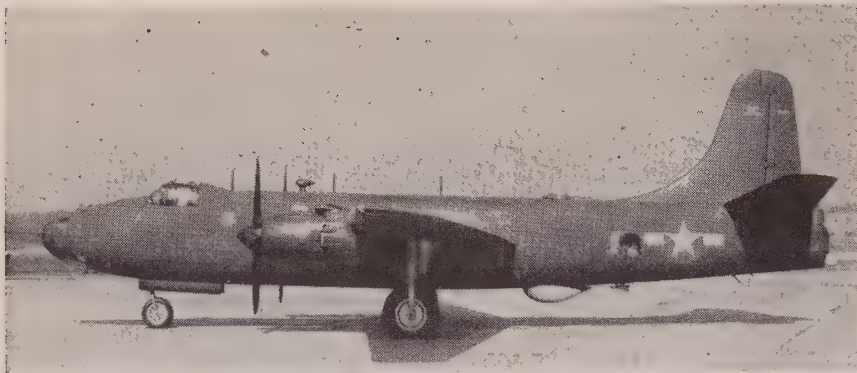


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NEW NAVY patrol plane—Martin XP4M-1, has four engines in twin nacelles

MILITARY AVIATION

Navy Air Transition

Since the end of the war the U.S. Naval Air Test Center, Patuxent River (Md.) has been a bee-hive of activity. Standard wartime models of piston-engine fighters, such as the *Hellcat* (F6F-3) and *Corsair* (F4U-1) have been supplanted by the faster *Bearcat* (F8F-1) and improved F4U-1. These are both in the 430/440-mph class, with the Vought job (F4U-4) faster above 30,000 feet on account of its turbosupercharger.

Transition to a jet carrier fighter force is well under way. Tests with the McDonnell FD-1 *Phantom*, powered by two Westinghouse 19XB-2B turbojets (1,400 pounds thrust), have proved the practicability of the pure jet fighter for carrier use, although it has its special problems. Chief among these is the need of shielding flight deck personnel from the jet exhausts, although contrary to rumor (based on reports of "burned runways" used in the early days of the Messerschmitt 262) the exhaust does not affect the flight deck. Also pits may have to be provided to load heavy bombs underneath the low-slung fuselages of jet planes. Faster jet fighters are now under test, including the North American XFJ-1 (one General Electric TG-180 turbojet of 4,000 pounds thrust), the McDonnell XF2D-1, powered by two larger Westinghouse units, the 24C with a design thrust of 3,000 pounds, and the Chance Vought XF6U-1 *Pirate*, with one 24C. These pure jet fighters will be in the 550 to 600-mph class. Tests also continue with the propeller-plus-jet combination, employed by the two Ryan aircraft, FR-1, *Fireball*, and the recently tested XF2R-1.

Air Patrol

As part of the inter-service compromise which resulted in the merger bill, the Navy has retained its air patrol and anti-submarine function, but is temporarily embarrassed in not having funds for the new aircraft it is going to need to do the job. One model is the twin-engine *Neptune*, of which the *Truculent Turtle* is the most famous example. The other is the Martin XP4M-1 which offers the interesting combination of two conventional engines with propellers and two jet engines in the same nacelles. Total horsepower is more than 14,000, with

6,000 from two P & W *Wasp Majors*, and 4,000 pounds of thrust from each Allison J-33-4 turbojet. All this power for a 78,000-pound airplane allows a top speed of well over 350 mph and a cruising range of 3,000 miles. It also can cruise on either set of powerplants alone, and this will permit some American experience with mixed powerplants similar to that being gained by the British in their *Nene-Lancastrian* (2 *Merlins*, 2 *Nenes*). Observers who have flown in the Martin ship with only the jets operating report the same effect as mentioned by Air Commodore Whittle regarding the *Nene-Lancastrian*—smoothness, lack of vibration, and so quiet that it is possible to hear the engines in aircraft being overtaken.

Flying Boats Have a Future

Despite the tremendous amount of long-range over-water flying by land-based planes during the war and the trend to such equipment by the international air lines, there is strong support in some quarters for flying boats. The British are going ahead with their Saunders-Roe jet-powered flying boat fighter, the big Saunders-Roe S/R 45 with 12 turboprops, and flying boats by the Short company. In the United States Captain C. H. (Dutch) Schildhauer, one of the world's top authorities on flying boats, has applied to the CAA for permission to start a 'round-the-world service with a fleet of Martin JRM-2 *Mars* flying boats. He emphasized in his application the "need of at least one transportation operation using waterborne aircraft in the interest of national security." He stated that these flying boats would be eminently suitable for service as naval auxiliary transports in a national emergency. Flight crews would be members of the Naval Reserve.

Consolidated Vultee is also still in the running in this matter of flying boats, with reports of one now under construction which will be powered by the long-awaited Westinghouse turboprops, said to be in the same power bracket as the 24C turbojet.

Project NEPA

Scores of this country's top scientists and high-ranking army officers, the Oak Ridge establishment, several chemical companies

and 10 aircraft engine and gas turbine manufacturing companies have been engaged since last summer in the world's first attempt to apply atomic energy as a propulsive force for aircraft. Known as NEPA Project (Nuclear Energy for Propulsion of Aircraft), the program is under the direction of the Fairchild Engine and Airplane Company, as prime contractor to the Air Force. The Navy Air Force is also interested in the project, and the National Advisory Committee for Aeronautics is working in close cooperation, as is the Atomic Energy Commission. Maj. Gen. Curtis LeMay, Deputy Chief of Air Staff for Research and Development, is the director of the NEPA Project, and Gordon Simmons, Jr. of Oak Ridge is the technical director.

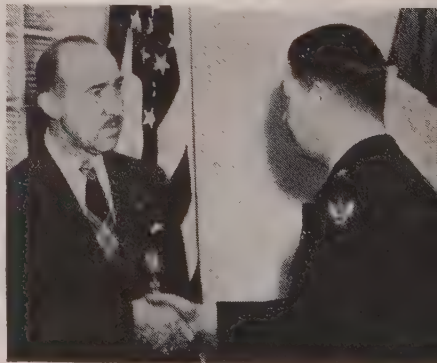
Studies are going forward in the application of nuclear energy to closed-cycle turbines, open-cycle turbines, turbojets, ramjets and rocket devices. It is understood that the first atomic-powered aircraft will be a pilotless plane, such as a guided missile or drone which can be controlled by a "mother" plane. The program is still in the initial stages, and tangible results are not to be expected for some time. Results when they do come will be revolutionary.

NACA Annual Report

The recently issued Annual Report of the National Advisory Committee for Aeronautics puts in writing the thinking of all aviation officials, military and civilian. As the report states, "The possibilities of supersonic military aircraft and guided missiles indicate that present types of military aircraft are becoming obsolete. We see no definite limit to the power that may become available for aircraft propulsion, nor to the speed that may be attainable." This very definitely coincides the thinking of the Government's aeronautical research bureau with that of the Air Forces.

All of which brings to mind a remark made by a Wright Field gentleman after he had been told of the successful establishment of a new non-stop record for long-range fighters. In substance the Wright Field bigwig stated that such a record was of no practical value inasmuch as the day of the long-range fighter plane was past. He further added that, in the case of another war "parasite" fighters (called such because they are "hooked" to the bellies of the bombers) would be employed. These, of course, would be very high-speed jobs, probably jet or rocket propelled. McDonnell XP-85 is of this type. N. F. S.

N. F. SILSBEE receives Legion of Merit medal, pinned on by Brig. Gen. Anderson



Did she marry a man
or a Pitcairn Mailwing!

He could fly anything with wings
... but couldn't handle a woman!

He lollygags with the
Golden Queen of the carnival.

It was tough to be in
love with your brother's wife.

*A story
so magnificent
it took 6 great stars
to tell it!*



He could spot a chicken from
10,000 feet ... in skirts!

THEY FLEW EGG CRATES
BY THE SEAT OF THEIR PANTS TO
BLAZE A GLORY TRAIL BEYOND
NEW HORIZONS!

The screen's tribute to the men of aviation, filmed
from the great novel about the fabulous Flying
McDonalds, four brothers who traded the 'soft' life of
airplane acrobatics to become the first to fly the mail!

He wrecked planes getting
the mail through safely.

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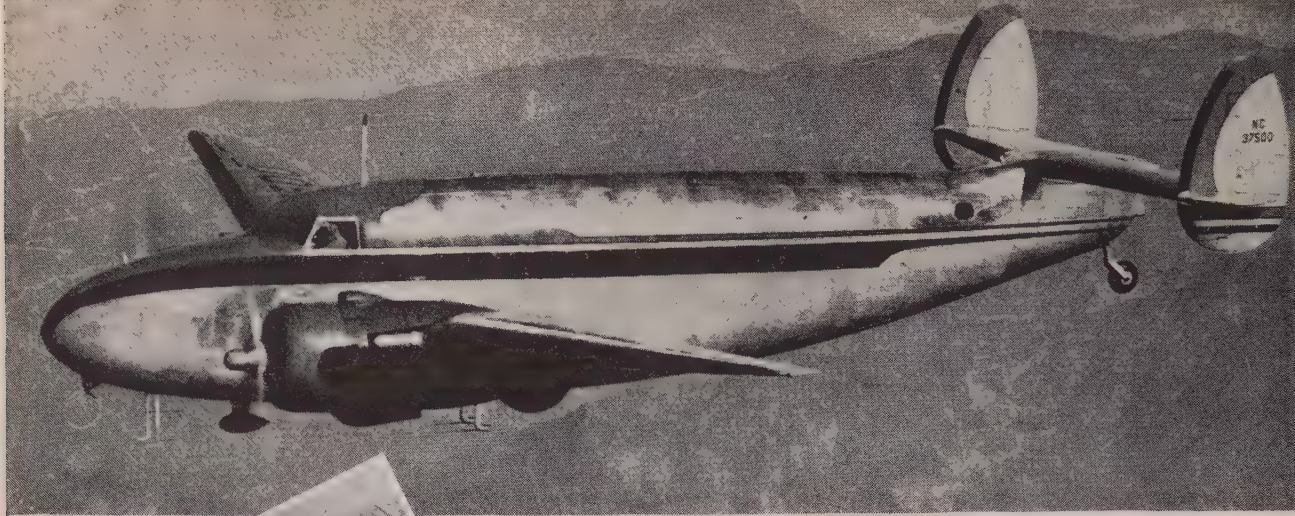
Johnny Sands · Jean Wallace · Edith King · Robert Fellows

Produced by

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JOHN FARROW





TODAY'S EXECUTIVE keeps appointments via company plane. Popular as executive ships are Lodestars (above), DC-3's, Beechcrafts

The AIR-MINDED

By J. DAVIS SCOTT

BUSINESS is sprouting wings. America's industrial, business and government leaders are going places along the highroad of the skies and doing things—in a hurry.

Days and months of valuable, needed time is being saved. More work is being done. The term "executive plane" has become a new addition to our business language, threatening to push the once important "private railway car" of business talk into the limbo of forgotten words.

A couple of decades ago private railway cars were the hallmark of importance in industry. The names of their owners for half a century included many of America's great leaders.

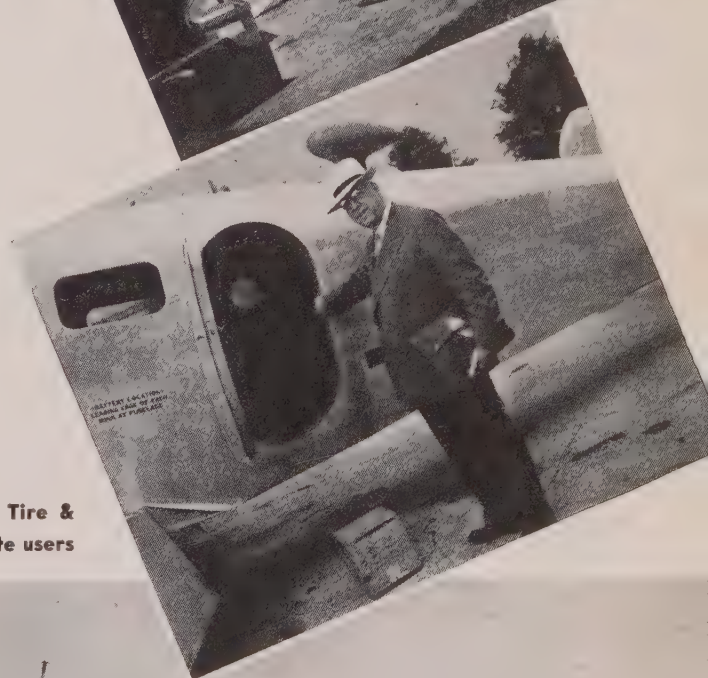
Today, business has moved upstairs for its transportation, and although this change is still a rather

YESTERDAY'S TYCOON knew he'd "arrived" when he had his own railway car. Car below carried Jay Gould around country in 1870's





GOODYEAR PREXY, E. J. Thomas carries on his work in one of several Goodyear planes



EXECUTIVE

new development, there are more company and executive airplanes today than ever were private railway cars—even in the latter's heyday.

Today speed has become a necessity in American business and government.

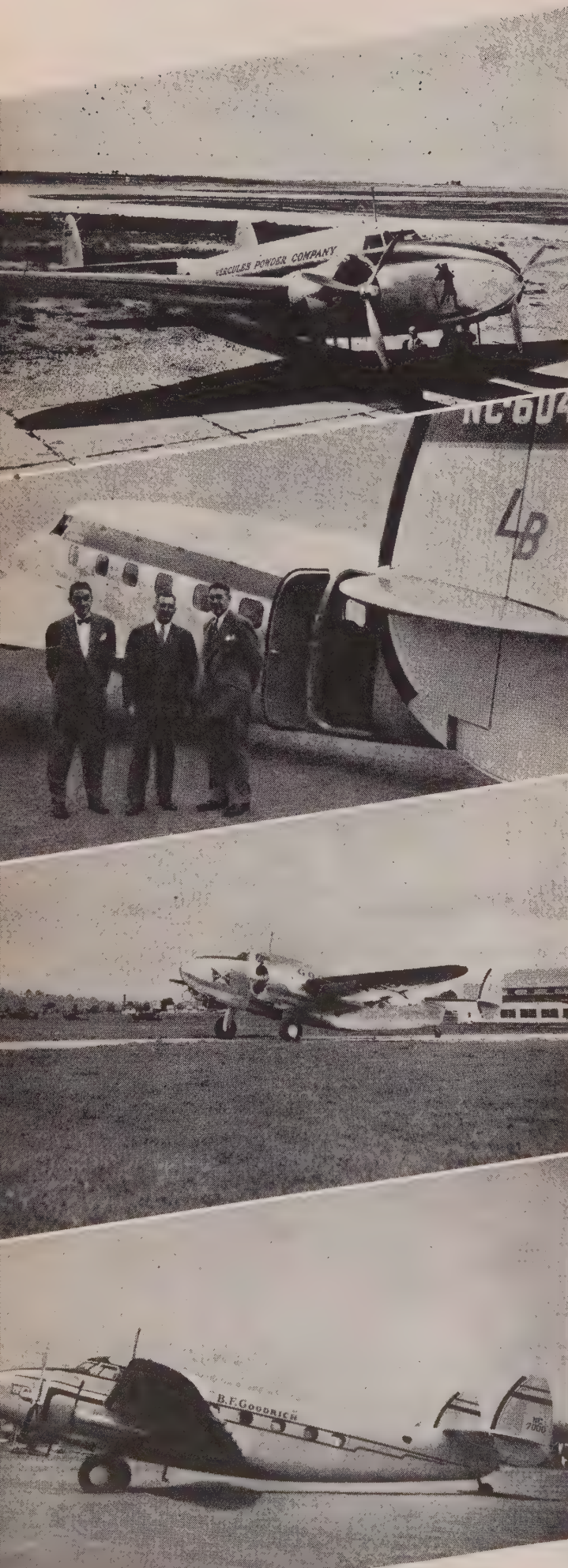
President Truman pushes aside the papers on his White House desk, hurries to the airport, climbs aboard his "Sacred Cow" plane and flies to his mother's home in Missouri for her 94th birthday party—and is back in Washington that same night.

Directors of a big corporation fly in a company plane to a branch a couple of hundred miles away to "see for themselves" a proposed building plan—and then make their decision as they ride through the skies en route home.

A trio of executives leave the Chicago airport in their company's plane on a Friday at noon, attend sales meetings in Dallas, Atlanta and New York and are back at their desks in Chicago on Tuesday.

CHAIRMAN OF BOARD Litchfield (right) rides Goodyear Tire & Rubber Co.'s Beechcraft. Oil companies, too, are predominate users





EXECUTIVE TRANSPORTS owned by such companies as Hercules Powder, Lever Brothers and Goodrich are in constant use carrying company bigwigs to various sales meetings, board meetings, taking place all 'round U. S.

A company plane is used by a New Jersey automotive products firm to stimulate sales: Jobber salesmen from as far west as St. Louis are flown to the company headquarters for frequent sales meetings which company officials claim have resulted in sizable sales increases.

An advertising agency executive finds, with the aid of his company's plane, that it's all in a day's work to be in Rochester, Detroit and Chicago. Secretary of the Interior Krug covers Alaska and the Pacific Coast and visits every interior Department managed establishment in a couple of months—while Secretary of State Marshall, with the aid of the Government's executive plane, daily finds he is never more than a full day's journey away from the White House—no matter whether he is in Paris, Berlin or Moscow.

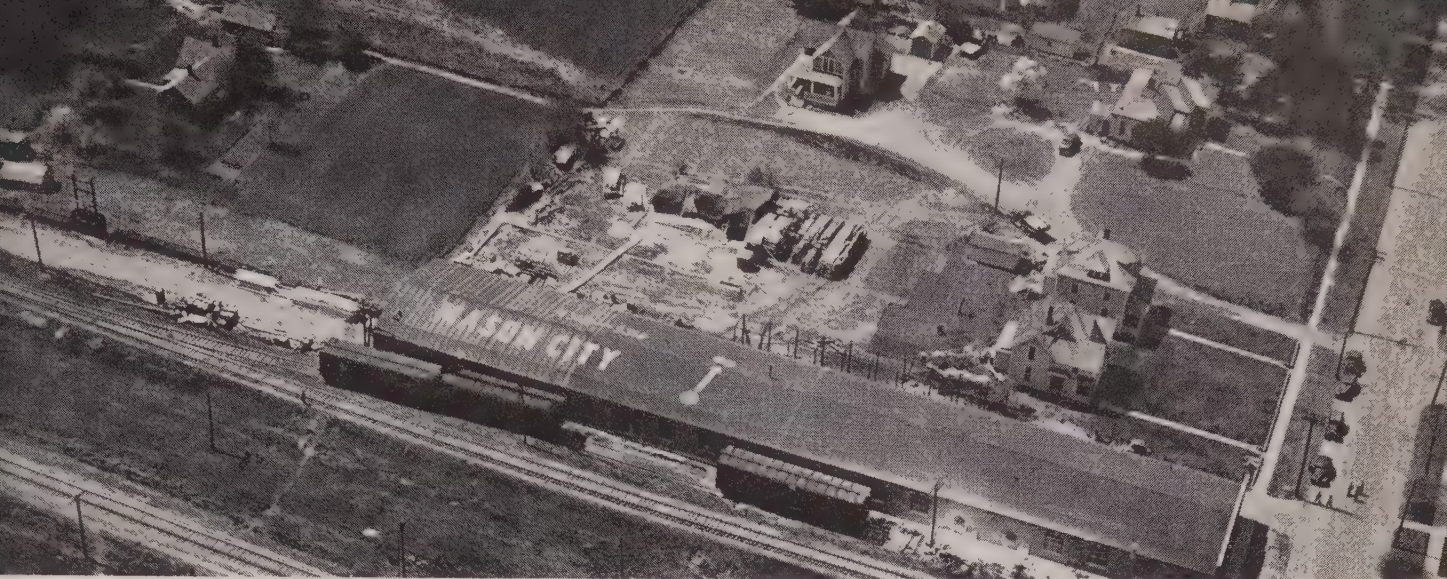
The company and executive plane personifies the transition of business to the air age: It represents the logical evolution from the private railroad car of the gay 90's and early 1920's. But probably only in total costs can today's executive planes be compared with yesterday's executive railroad cars.

Those "mansions on wheels," as railroad historian James W. Holden once described them, were really something to behold.

Only a comparative few are in operation today. A number have been consigned to the scrap heaps and others are gathering dust in rail yards. Typical is the private railway car of Eugene G. Grace, chairman of the board of the Bethlehem Steel Corporation. This car rusts on a Bethlehem side-track while Grace and other company officials now keep their business appointments around the country in one of Bethlehem Steel Corporation's planes.

Little used, too, is the magnificent private railroad car of Major Max C. Fleischmann, the yeast manufacturer—because today the Major finds his specially built and equipped Lockheed *Lodestar* gets him places in better time.

Major Fleischmann's private railroad car, "Edgewood," is still the largest and probably the best known American "mansion on wheels." The car, built in 1926, is plain in decoration and standard in plan but noteworthy for its structural strength, insulation and gadgets. The Major was proud of its soundproofing, its protection against weather's chills and its filtered and washed air system. It was the first car to have a telephone to plug in at stations and its gadgets included a speedometer, altimeter and registering (*Continued on page 52*)



AIR SCOUTS Squadron 180 put their hometown on the map, gave helping hand to pilots by airmarking warehouse

Your Town on the Map

THE Air Scouts of Mason City, Iowa, had gathered at the Armory as had been their custom every Thursday since Squadron #180 was organized. The Squadron Pilot called the meeting to order; the roll was read; and as the program continued, the Squadron Pilot asked:

"Is there any new business?"

One of the Scouts took the floor.

"Yes, sir," he replied. "I think that our Squadron should adopt as a civic service project the air marking of our city. I have been reading quite a bit about the Air Marking Program of the Civil Aeronautics Authority, and certainly think that we should do something to help."

This remark literally put Mason City, Iowa, on the map. Immediately the motion was made to adopt the project arousing a second thereto. The Squadron Pilot called for order . . . the motion was open for discussion. The debate that followed brought out many pertinent questions. Where will the sign be painted? Where can information be obtained for its construction? How can the necessary paint and other material be procured?

At the end of this discussion, the motion was carried and committees were appointed to find answers to all these questions for the next meeting. One committee got permission to put the sign on the Stoddard Manufacturing Company warehouse. Another committee contacted several civic-

Iowa Air Scouts do man-sized job of putting town on the map

By W. W. BROCK

and air-minded citizens and the paint and other necessary materials were donated. A third committee got the CAA instructions for the painting

of such a sign. At the close of the following meeting the fellows were all ready to go.

The next few Saturdays found many curious people watching some 10 or 15 boys very busy with chalk and string, paint and brush on top of a warehouse making their contribution to safer flying in the U. S.

The Air Scout's of Mason City are typical of the many to be found throughout the nation. They know that the future of private flying is going to be dependent to a large extent upon its simplicity and safety. They realized that the private flyer does not have at his command the navigational facilities that are available to the airline pilot. It is obvious to them that there are hundreds and hundreds of cities, now unmarked and unidentified, that must be air marked if cross-country flying is to be as simple as the weekend trip in the auto.

In the words of one Air Scout: "We feel that in adopting this program we are rendering a dual service. We are helping the pilot by placing another marker on the skyway, and at the same time we are identifying our city."

So with all the Air Scouts throughout the nation giving active assistance, another major step has been taken in adding to the safety and advancement of private flying.

SATURDAY saw boys, armed with paint, brushes, making their contribution to flying



Pilot's Report... FLEET CANUCK

Canadian-built personal air plane spells utility for the flying hunter and fisherman

By JAMES MONTAGNES

IF YOU'RE up Canada way and spot a lightplane (probably with a canoe fastened on one pontoon) winging its way toward the lake country, chances are you're looking at a Fleet *Canuck*. This two-place high-wing personal plane, by its performance and utility, is earning a solid name for itself on the U. S. market as well as with the homefolks in Canada. Built at Fort Erie, Ontario, just across the river from Buffalo, N. Y., the *Canuck* is one of the Dominion's top choices for the title of *today's* personal plane.

Designed and built to operate as efficiently on floats as it does on wheels, the *Canuck* is extremely popular with private owners who consider the airplane their main transportation to summer homes located on the many rivers and lakes that make up Canada. But the *Canuck* isn't just a personal plane; many a commercial owner uses this small plane as a cargo freighter, a plane for hauling out fish from the north country, or moving packaged cargo from east to west. Not a few salesmen, too, add to their list of calls by counting upon the *Canuck* to hop them from town to town, province to province. It is this utility which rates the plane high on the list of "performance" aircraft.

The day I flew the *Canuck*, the thermometer registered a near Zero and the winds were strong and gusty—not an ideal condition under which to "test" a new ship, but certainly a rugged one to either prove or disprove those good points an anxious

airplane salesman had listed and re-listed for me.

After starting the 85-hp Continental engine and running it up a bit, I released the *Canuck's* brakes and started rolling toward the end of the runway. The brakes and steerable tail wheel made taxiing an easy pleasure, and the low set of the engine cowlings permitted a degree of forward visibility similar to that of your automobile. The wide expanse of plexiglas in the *Canuck's* cabin afforded me a quick look around (. . . and up, too) to make certain all was clear for the take-off.

I nosed the ship into the wind, set the brakes again for a little more engine run-up, then released them and got on the throttle. The ship was off the ground after a run of a little less than 420 feet. From there she climbed easily to 2,000 feet at the nice rate of 550 fpm. I leveled off at 2,000, then headed the *Canuck* toward Buffalo.

She cruised along at 90 mph, and with a little more throttle quickly picked up her maximum of 111 mph. At this speed, however, with the engine turning over at 2500 rpm, conversation in the cabin required shouting. Back at cruising, though, it was possible to carry on a conversation without any raising of voices at all.

One of the first pleasant surprises your reporter got was a very noticeable lack of buffeting. Knowing the wind conditions and realizing I was in a lightplane and not a heavy one, I fully expected to be bounced about like (Continued on page 54)

CANUCK'S CABIN seats two comfortably. Shot of instrument panel (below left) shows position of compass atop cowlings. Luggage compartment behind seats (center) is large enough to hold such items as plane skis



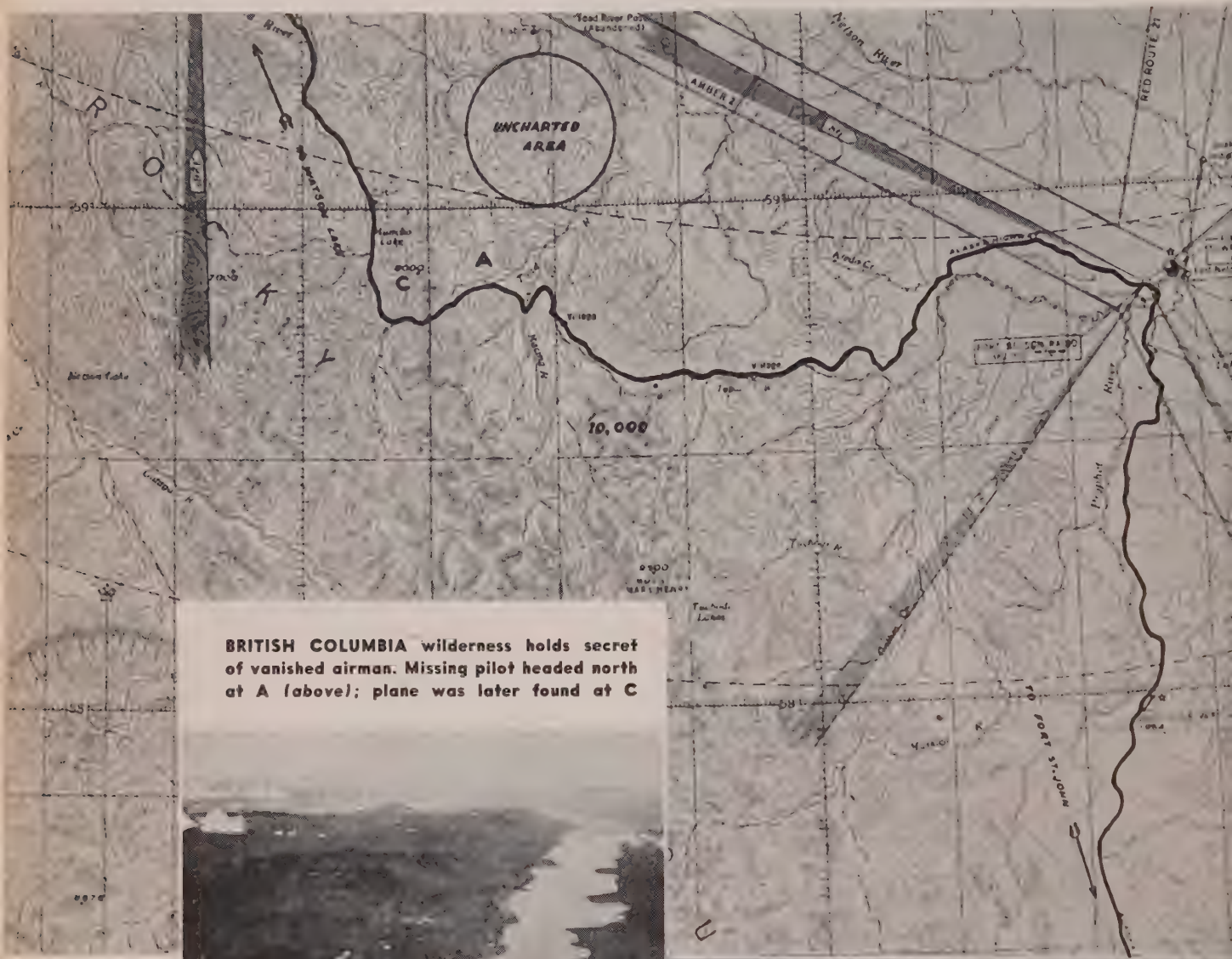


SPORTSMAN-OWNER of a Canuck often carries a canoe on one pontoon. This reduces plane's speed a little

FLEET-BUILT SKIS for wintertime use on the Canuck are easily installed. While one man holds up the plane, the other slides ski into position, fastens it on wheel. Tail wheel also is removed, replaced with a ski



Case of the Vanished Airman



BRITISH COLUMBIA wilderness holds secret of vanished airman. Missing pilot headed north at A (above); plane was later found at C



**In which a pilot, ferrying plane to
Alaska, learns why to follow the road**

By BYRD HOWELL GRANGER

OUR flight of five personal planes cleared the U. S. Customs at Great Falls. We were en route to Anchorage, Alaska, and had progressed steadily up over the vast plains toward Canada. It was in the customs office that I first remember hearing anything about the vanished airman. The words of the customs agent bit like acid into my mind.

"That's wild country up there. Hope you don't run into the kind of luck that *Cub* pilot had. Wonder whatever became of him . . ."

"Who?" I asked.

"Sign here," he said, "and then I'll be ready for the next pilot in your group."

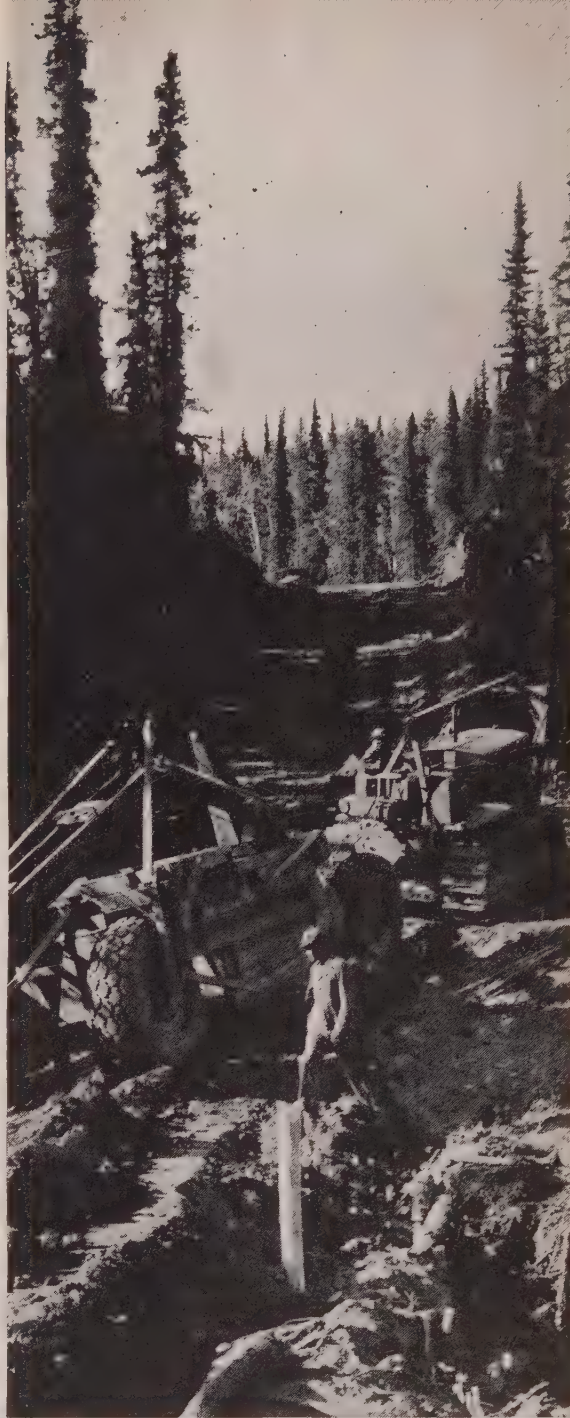
That was his only answer, and in the excitement of crossing an air boundary of the United States into foreign airspace for the first time in my life, I promptly forgot to follow up my query.

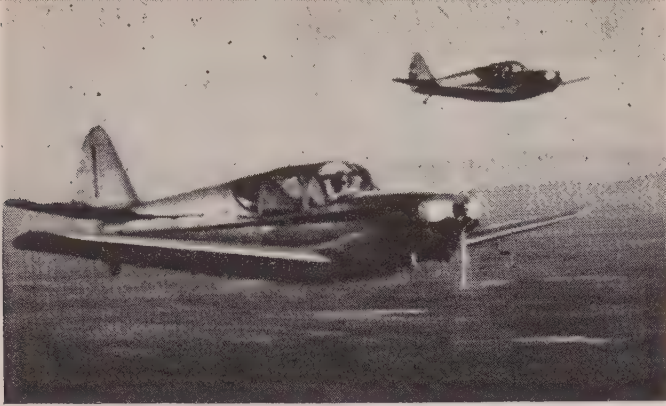
At our first Canadian stop in Lethbridge, Alberta, we signed our second papers. These declared us to be "Inwards" bound. The clean-cut Canadian customs agent smiled as he gave us our papers.

"Going up via the Alcan Highway? Well, be careful. Never did find that lad who was through here in a T-craft a short time back . . ."

"Who?" I asked. Again there was no answer. Later, on our way into town, I pondered the question again. *Cub*? T-craft? Could it be there were

ALASKA HIGHWAY, which pilots followed on ferry trip to Alaska, is just a narrow unpaved road cut through the wilderness north of St. John. The "highway" is bordered by towering trees, jagged peaks





RCAF ORDERS called for planes in ferry flight to stick close together, whether over mountains or tundra



ALCAN HIGHWAY below, planes followed orders to keep on course of the road. Weather became worse



RIVERS and tundra country bordered much of the Alaska highway which cut like a jagged scar across the land. During the war this road was used to bring in equipment, etc. Much of it winds above timber line



two pilots down in the woods of Canada? That shows how ignorant I was, for there is no such thing as *woods* in the forsaken acres of the north-west. Forests, yes . . . with the accent on the last two syllables of primeval.

My question concerning the one or two downed pilots was answered later that night while I was scanning the local papers. A single-column item caught my eye:

Soldiers Never Found A Trace Of Lost Flier

The disappearance in the northeastern British Columbia wilderness of ———, U. S. commercial pilot, poses a real mystery, according to Capt. G. G. Brown, leader of an unsuccessful two-week search for the missing flier. Capt. Brown, who returned with his party of six specially-trained men to Calgary Sunday, said ——— virtually vanished into thin air.

"We followed his footsteps up two rivers but in both cases he had back-tracked, and when the footprints petered out we could find no further trace of him.

"Though we searched the bush for a radius of 10 miles from where his plane had crashed, we failed to find any trace of him. You would think there would have been the odd shred of torn clothing, the remnants of a fire or a meal, but there were none of these. It is a real mystery . . ."

I was quiet for a long time after reading the item. Plenty of bandages and oil . . . no trace of the pilot. Not even a shred of torn clothing. The more I thought about it, the more I determined to learn all I could about this mystery of the vanished airman.

The next day our small fleet flew up over what seemed to me the rim of the world. Our first stop was Calgary, a name smacking of red-coated mounties and burly lumberjacks, neither of which we saw during the entire trip. At Calgary I began asking questions . . . and getting a variety of answers remarkable for their contradictory nature. The lost pilot was flying (1) a Luscombe, (2) a T-craft, (3) a *Cub*, (4) a Fairchild. He was (1) flying alone, (2) flying in company, (3) had a girl passenger, (4) had another pilot in the plane with him. I began to see it would take work to get the facts, if it could be done at all.

At Edmonton, we again cleared through customs. All planes flying through the interior of Canada are under the direct control of the RCAF. Our flight was no exception. Although our ships belonged to Northern Air Trading Service up in Anchorage, for the moment they were a part of the RCAF. Our briefing was thorough. One by one, each of us went over the emergency equipment required to be on board each (Continued on page 56)



TWO MEN launch seaplane with dolly. Crossbar of dolly is burlap- or carpet-covered to protect metal floats

SEAPLANE HANDLING

By GENE LANDMAN



THE FLOATS are 99 per cent water tight, but condensation, seepage can make ship nose- or tail-heavy in time. It's best to inspect floats before each take-off

COCKPIT CHECK includes position of water rudder (shown in up position). Rudder is down to taxi, up to take off. Pilot must hold stick back and aileron into wind



WHILE Brooklyn Bridge may be different from every other bridge in the world, Brooklyn Sky Port looks like most seaplane bases and thereby hangs the tale. They handle the seaplane and instruct seaplane pilots not unlike any other seaplane base that has pride in its operation.

Veteran seaplane pilot-instructor, Phil Gennuso, demonstrated a number of "musts" for SKYWAYS. Number one on Phil's list regards float inspection. He recommends this before each take-off. Pontoons accumulate water by seepage and condensation . . . in front and rear pontoon compartments, especially, water can upset the plane's stability, making it nose

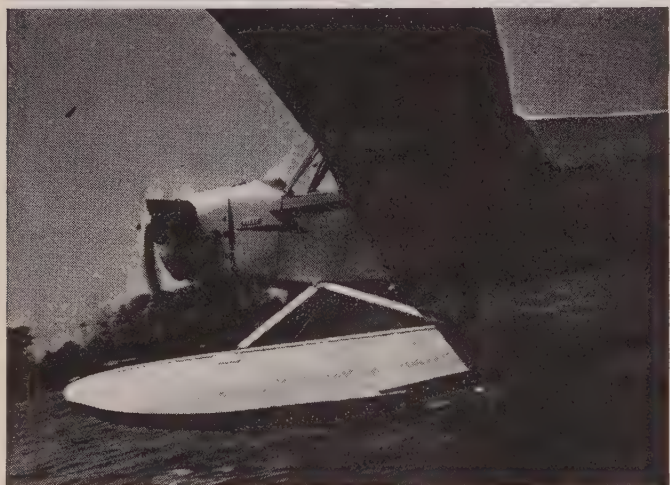
DON'T LEAVE the dock until the immediate vicinity has been cleared of row boats, etc. This pilot must cut his engine or turn immediately. Planning ahead is safest





THE TAKE-OFF is started (upper left) with stick full back. Then full throttle is given. Later control stick is eased—not forced—forward to put plane on-the-step

ON-THE-STEP plane skims on surface on level keel like a motor boat. On smooth water with little wind to assist take-off (above) one float at a time is lifted off by S-turn if there's room or use of aileron into-the-wind



ROUGH WATER take-offs require different technique. The strong wind will assist in placing plane on the step but stick must be held back some to keep bow of pontoons from digging in. Waves may bounce plane up

HOW HIGH is "up" in a seaplane? For that last 50 feet in landing, pilots judge by shore line, boats, etc.; for the touch-down, by waves and ripples on rough surface



or tail heavy. If no pump is available to "bilge" the pontoons, a sponge will do the trick.

For water maneuvers (taxiing) the pilot sets the water rudder down. Upon leaving the dock the pilot holds the stick all the way back with aileron *always* into the wind. Use of aileron will offset the wind's ability to force the upwind wing higher and higher until the plane capsizes. Holding the stick back, besides keeping the prop above spray, tends to dig the rear end of the pontoons in the water. The ensuing drag favors the plane's handling characteristics.

Don't leave the dock or ramp without checking the immediate vicinity for other craft. An all-inclusive safety measure in seaplane water maneuvering is this type of "planning ahead."

Normal take-off procedure (with water rudder "up") is to pull the stick all the way back and then give full throttle. This gets the nose up and even though the drag is increased, the suction on pontoons is *decreased*, because more of the pontoon is out of the water. Next, pressure is relaxed on the stick, or ease it forward, until the seaplane is "on the step," with pontoons just skimming along the top of the water. Tip to landplane flyers: *don't push* the stick forward when you start.

Take-offs on smooth or glassy water present some difficulty. Once planing (on the step) the nose is pulled away up and then one pontoon is lifted out of the water first. This releases most of the water suction. This maneuver is also used when space is short, or to change take-off to avoid obstacles. Be careful when you make turns on the step—it's a sure way to become airborne. Can prove embarrassing.

Rough or choppy water take-offs present prob-



GLASSY WATER landings require absolute caution. Pilot levels off (above) nose-high when 50 feet high, uses 1,500 rpm and waits for pontoons to touch down

NORMAL LANDING (above right), demonstrated by veteran seaplane pilot Phil Gennuso, shows plane with nose slightly high and pontoons sinking into water with bow up out of the water. The drag slows up the plane

lems too. The stick is held back to hold the bow end up and prevent pontoons digging into the water. The plane will get on the step fairly quickly. Becoming airborne is simple as the waves break the suction. Waves might "bounce" the plane into the air before flying speed is attained, in which case ease the stick forward to prevent stalling.

Coming in to land, the seaplane pilot judges his height above the water by shore line. If the pilot is landing without reference to shore, he should follow the procedure for glassy water landings.

The hardest thing to do is make a good landing on glassy-smooth water. It causes most seaplane accidents. Accepted procedure is to make a power approach in an extremely shallow glide, looking ahead or sideways but never directly down. As the water appears to come closer gradually lift the nose and increase throttle to about 1,500 rpm to maintain speed. Start leveling off in this position when at least 30 to 50 feet high, holding the wings level from here on down. As soon as the pontoons contact the water, cut the throttle . . . not before!

A normal landing under ideal conditions is one with engine idling, nose slightly high and stern of pontoons sinking into the water. Rough water landings are an exaggerated normal landing—nose higher and stern lower in full-stall position.

Turns on the water are always made with aileron into wind and stick back. Into the wind, no throttle is used, but out of the wind throttle is used.

The dock is approached into the wind as consistently as possible. The pilot should make a pattern similar to following a curved driveway . . . although the final approach to the dock should be from a distance of 25 feet.



SIDE VIEW of the correct method for landing on rough water (above) illustrates full-stall type landing with stick full back. Note the nose is high and stern is low

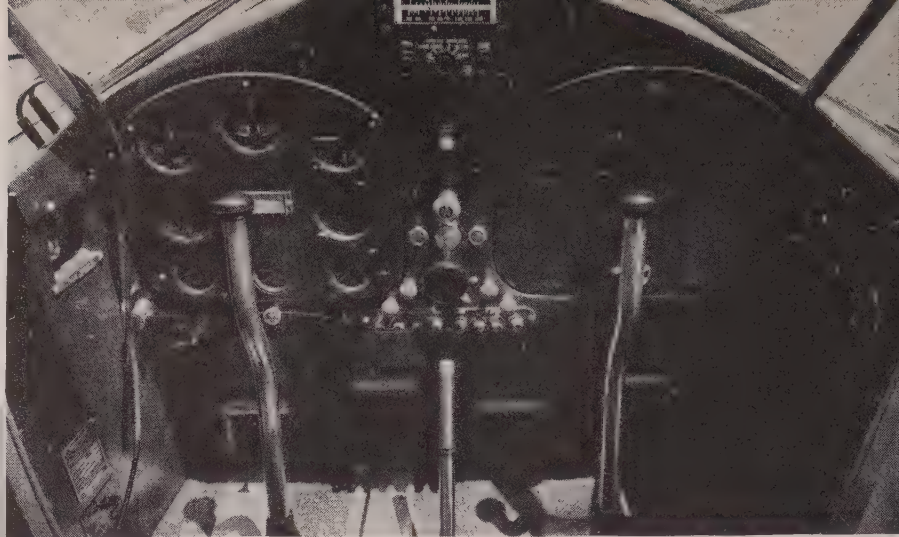


ALL TURNS are made with stick back and aileron into wind! Turns into wind are made without power but water and aero rudder action helps plane weathercock. Turns out of wind are made with power and rudder

DOCK APPROACH is planned so that plane comes alongside into the wind. Pattern on water is similar to following curved drive and stopping at center of curve



MAJOR CROWLEY (below) flies his Fairchild from Westchester County Airport. He's a staunch advocate of the stick control for the pilot



STICK CONTROL

For STICK CONTROL—Major J. Crowley

PERHAPS I'm stubborn about this subject of "stick" vs "wheel", but it may be for the same reason that a lot of other pilots I know favor the "stick" over the "wheel." We learned on them. On the other hand I've flown enough "wheel" planes of various types to be able to form my opinion without too much "learned-on-them" influence.

To me the "stick" has always seemed to be the most logical and most natural means of controlling the movements of an aircraft—whether landing or taking off, or in the air. True, in large transport types of aircraft where two-handed manipulation of the control column is necessary at times, wheels have their advantages, but in the personal type of pilot-owner ship the "stick" seems to me to have it all over the "wheel."

First of all it does not obstruct any part of the instrument board from view, as some "wheels" do at times. Again, it enables a pilot to have one hand free for other use during landings and take offs, without having to adapt yourself to use one hand

on a two-handed "wheel." In fact if two hands are needed—for maps or sandwiches while getting in cross country time—the stick may easily be held with the knees to keep your plane on course.

The fact that military trainer ships are equipped with "sticks" seems to bear out my contention that a "stick" gives the pilot better "feel" in flying the ship. Remember the old rule the instructors used to tell us: "To return an aircraft to level flight, move the stick in the direction of the highest part of the ship." In other words if a wing is high "push it down with the stick" and if the nose is high "push it down" with that stick again. That wouldn't work too well with a "wheel," any better today than when I learned to fly in 1917.

Full aileron take-offs have been made in ships with wheel controls, but not with a stick! The stick would be way over to the side—an unnatural position for take-offs in a stick control ship.

The stick is easily removed and reinserted which allows the pilots with stick control an expedient alternative of "with or without" that flight control.

It may be just a matter of personal preference but a "stick" seems to give me better feel in landing and taking off, which after all are the most important parts of any flight when you come right down to it. As long as the controls are easily moved to the satisfaction of the pilot and the result is safe flying, I'll not become rabid on the subject—but just for the record I'll keep right on preferring "stick." ✈

AIRMEN OF THE JURY*

This is YOUR page for debate on all sides of the many phases of the aviation picture. Here, airmen of all ages and "hours" may hear the pros and cons of arguments old or new, the question of the merit of designs, equipment and procedures of interest to you all, and then express YOUR views via the coupon. The value of this page to you and the industry will be in proportion to the number and enthusiasm of the "Airmen of the Jury" who take part.

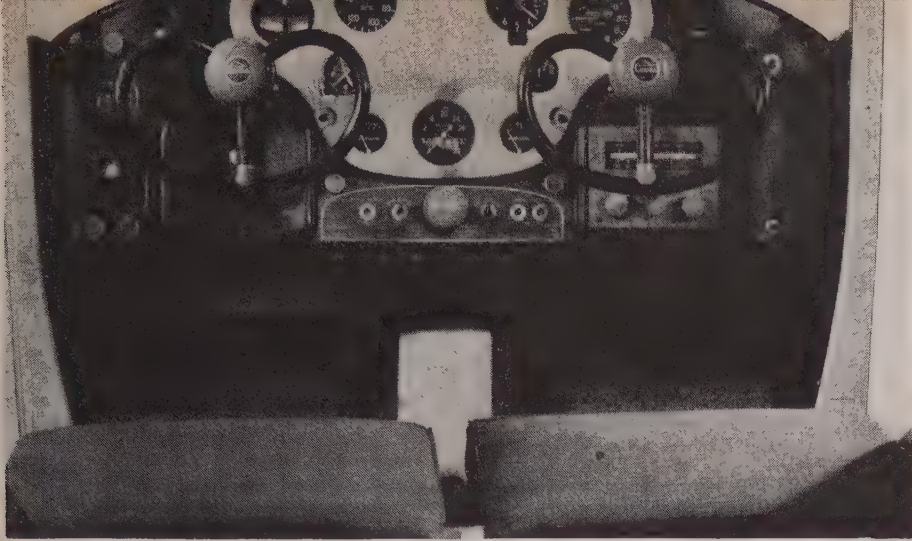
Score to date:

Low Wing.....71%; High Wing.....29%

Tractor Prop.....58%; Pusher Prop.....42%

* Conducted by C. B. Colby

Genial Major Joseph Crowley, Commanding Group Nine of the New York Wing of Civil Air Patrol, has been flying since 1917 and has logged several thousand hours in various types of craft. He owns a PT-26, and is definitely for the stick.



FRANK WARD (below), Superintendent of Operations at Westchester, served as Lt. Commander during war. He speaks up for wheel control



VERSUS WHEEL

For WHEEL CONTROL—Frank Ward

FRANKLY I can't think of a single instance when a "wheel" would not be much more comfortable and practical than a "stick." I personally prefer a "wheel" control for many reasons. For example, one of the main benefits from this design is in the greater amount of usable floor space made available.

This clearing of the floor space by use of a "wheel" is a great asset in selling flying to the layman, the ladies in particular, for it does away with the problem of trying to be graceful getting in and around a stick. The ladies prefer the "wheel" over the "stick" for greater comfort not only in entering and leaving but in flying. It saves a lot of banged knees for *both* men and women.

This extra floor space permits changes in position on long cross-country flights when feet are not needed on the rudder pedals. You cross-country and charter pilots know what a help it is to be able to change position once in a while, without being reminded of it I'm sure. With the "wheel" mounted on the instrument board there is no chance of blocking "stick" movements by spare boots, cameras, and the various other items we lug around with us at times. It has happened that seat cushions and 'chute packs have slid forward under the pilot and made it difficult if not impossible for the "stick" to be pulled clear back for a landing. With a board mounted "wheel" this hazard is eliminated.

It is true that some "wheels" in certain positions *do* obstruct a section of the instrument board, but

Frank M. Ward admits with a drawl that he is "QB" # 3334, has over 8,000 hours of logged time and more CAA ratings than he can cram into his billfold. His ship is a 150-hp Stinson Voyager and he emphatically prefers "wheel" control.

this is being eliminated by better board and "wheel" design on the newer models. We had this trouble with some of our SNB's at Radar School and solved it by simply turning the "wheel" down instead of up. With the "wheel" below the pushpull shaft instead of above it, it also had the advantage of permitting the student to steady his "wheel" by resting his forearms or hands against his knees while flying on instruments.

Another thing in favor of the "wheel" in student training is the fact that those who originally learn on "stick" *must* have dual instruction on "wheels" before they may solo on the latter.

I frankly think that the "wheel" equipped ship presents less problem to the raw student than a "stick" because he is undoubtedly already used to a wheel in his car or boat. The similarity helps make him feel at home in a plane so equipped, while the "stick" requires an entirely new form of motion coordination. I personally vote decisively for the "wheel" every time.



.....

AIRMEN OF THE JURY

- This is your ballot on Stick vs. Wheel Control.
- I favor Stick_____ I favor Wheel_____
- BECAUSE: _____
- _____
- _____
- _____
- _____
- Name_____ License Number_____ Hrs._____
- Address_____ City_____ State_____
- Do you own a plane?__Make____Type____H.P._____

*Two & Three Wheel
Retracting Types*



Republic Seabee



Globe Swift




*Skyways
Sketches*

LANDING GEARS




North American Navion

*Gear Trends
in Today's
Personal Aircraft*



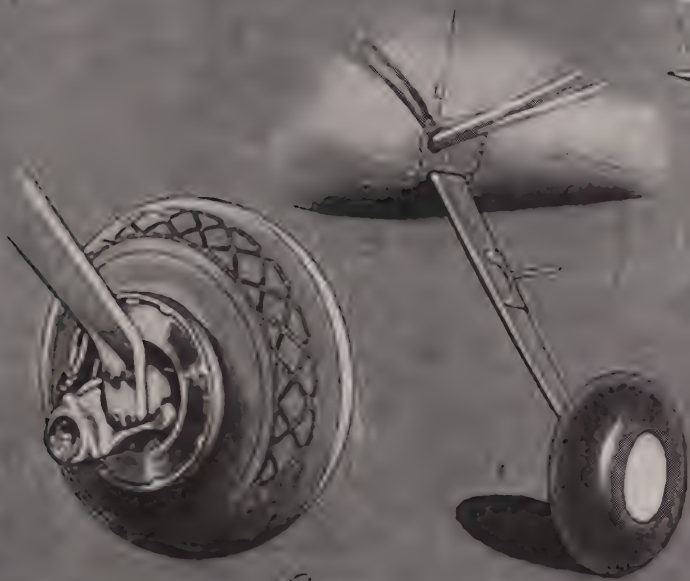
Piper Cub Trainer

A detailed illustration of a Piper Cub Trainer, a small, high-wing, open-cockpit aircraft. It features a simple fuselage, a single main wing, and a tail boom with a vertical stabilizer. The landing gear is a conventional two-wheel arrangement.




Fairchild 7-24

A detailed illustration of a Fairchild 7-24, a biplane with a high-wing configuration. It has a prominent central fuselage, a large upper wing, and a smaller lower wing. The landing gear consists of two main wheels and a tail wheel.



Cessna


A detailed illustration of a Cessna aircraft, showing a side profile of the fuselage and a close-up of the landing gear. The landing gear features a large, treaded tire and a complex strut assembly.



*Engineering &
Research Encoupe*

A detailed illustration of an Engineering & Research Encoupe, a small, single-engine aircraft. It has a low-wing configuration and a conventional landing gear with two main wheels and a tail wheel.

*Two & Three Wheel
Fixed Types*



**DOUGLAS
ROLFE**

A detailed illustration of a Douglas Rolfe aircraft, showing a close-up of the landing gear. The landing gear features a large, treaded tire and a complex strut assembly.



MARY DECKER, 16, made her solo hop in a *Champion* after only 3 hours 45 minutes instruction from Paul Eddy of Findlay Ohio airport. Moral: Learn to fly young!

HANGAR FLYING

Cheaper 'n Shoe Leather

LOCK HAVEN, PENNSYLVANIA—The good word from Cub Haven is that the 100-hp Lycoming engine in the Piper *Super Cruiser* averages a 5.75-gallon fuel consumption per hour, or in 35 hours 40 minutes flying time gasoline expenses amount to \$87.56 or 2.33 cents per mile. Considering all the ground covered, that's cheaper than shoe leather. Did we hear some one say, "Faster too!" That's beside the point!

Not Worth the Salt

SAVANNAH, GEORGIA—Bill Hobbs, Manager of the Wilmington Island airport, received an urgent call for his "wrecker" services. A pilot who had flown as far as he could in very poor flying weather had landed his all metal plane on the beach a little on the unsuccessful side with the result that the ship had to be abandoned. Several tides rose and fell before the ship was retrieved—it took an engine replacement to get it off. The salt water, in the space of but for days, ate away oil lines, fuel lines and breaker points. The plane was not salvageable. The pilot had been headed for his home in Charleston, S. C., when forced down but a few miles off by lowering visibility. Said Bill Hobbs, and rightly, "If that pilot had lived further away he wouldn't have tried to get home in that weather."

359 Miles vs. 3.5 Miles

CHARLESTON, S. C.—Department chain store owner A. C. Collins flew his Cessna 140 to Washington, D. C. from his home town Myrtle Beach, S. C. paying less for aviation fuel than he did for his cab fare from the airport into the city. It was \$3.06 for gas; \$5.00 for cab! This is a "bite" personal flying has long been exposed to.

1947 Light Plane Racing

WASHINGTON, D. C.—Admiral Luis De Florez, chairman of the contest board of National Aeronautic Association, announced addition of a light-plane event to the Cleveland National Air Races (1947). It will be sponsored by Good year Tire and Rubber.

News! About Ross Airport

ST. LOUIS, MISSOURI—Ross Airport is inside the St. Louis city limits—due west one mile from the only island in the Mississippi River (along the St. Louis riverfront) . . . a bus or street car comes within one block of the airport . . . hangar rates are \$15.00 a month or \$1.00 a night in a heated hangar (guarded at all times by a watchman) . . . tie-down rates are \$10.00 a month, 50 cents a night . . . practically every building on the field bears airmarking . . . two runways exist of 2,850 and 3,090 feet in length . . . 270 x 165 foot concrete apron . . . plus service facilities on field for all private and executive-type aircraft . . . training rates: \$7.00 for solo and \$9.00 for dual by the three operators on the field at the present time. Their transient logs show they have had all light aircraft in and out, as well as twin-engine Cessnas and Beechcraft. Radio-wise, Ross Airport is on the southern leg of St. Louis range (206 kc) or three miles due south of St. Louis' KWK (1,350 kc).

Signs of the Times

FAIRFIELD, CONNECTICUT—Decker Air Services, Inc. has published a complete set of airport guide books for use of private flyers who want to know where to find that airport they remembered hearing so much about . . . and whether there's a place to satisfy the appetite . . . to bed down . . . to pick up transportation into town . . . etc.

Wheels Up? Or Down!

FARMINGDALE, LONG ISLAND—Republic Aviation Corporation, makers of the *Seabee*, advise that forced landings on land in the amphib should all be performed *wheels up!*

The *Seabee's* hull is a sturdy piece of construction (one of the best ships we know of to have to land, wheels up, on the ground) and has been landed successfully "wheels up" on rough, unfamiliar ground—and most unsuccessfully wheels down on rough, unfamiliar ground.

Remember, forced landings: *Wheels up!*

And who would ever think it necessary to remind you, *wheels up* on the water, too? However, pilots have tried to land on water with the wheels in the wrong position.

Check those *Seabee* wheels. They belong down for only one operation: Landing on a smooth ground surface.

In the Hands of the Law

GRAND RAPIDS, MICHIGAN — Latest Michigan notable to become a plane owner is Michigan's newly-elected Governor, Kim Sigler. Governor Sigler recently learned to fly, and has just taken delivery on his 1947 Cessna 140. In keeping with his established practice, the new governor purchased and will maintain his plane with his own funds, and will use it for his personal transportation.

Tablecloth Wave-in

OFFERMAN, GEORGIA—There was something about the lay of the land that made it appear to be a good spot to set the Aeronca down before the fuel supply gave out completely. The lost pilots circled the pasture a couple of times, and on the third round saw a little woman standing by a fence waving a tablecloth. They picked up their wind direction from the white cloth, banked into the wind, and landed just before the last sputter.

Mrs. Annie Walker then folded her "wind sock" and walked over to the plane. The pilots could hardly believe that a little elderly lady with greying hair could have understood their plight, until she explained that her son and daughter, Fred and Myrtice, both use the field to land on. Because the plane was a different color from the one they flew, Mrs. Walker guessed someone was in trouble, and went out to wave them in.

Her son Fred taught himself to fly but Myrtice got her license under the Bill of Rights. As a WAC, Myrtice (below in front of *Cub* she flew home) was a driver.



The FLYING SPORTSMAN



A Special Section... Sports in Season

It's FLY TIME



*Yep, it's spring again . . .
and the trout are waitin'*

IF THERE is any sport on earth more controversial than fly fishing, it must be the sport of amateur fly tying. Together they constitute one of the world's greatest of participant sports and fanatical fly fishermen share and share alike whether they be king or pauper. It is the superb sport of gentlemen, for this is one game that cannot be "fixed."

And though kings of England and Scotland have pursued the wily brook trout in his aquatic lairs of the Isles, and Lords of the Manors devoted their lives to this "sport of kings," one of the most characteristic elements of fly fishing is the fact that while King George the Fourth, King William the Fourth, and even Queen Victoria herself are fading fast in the memory of men, the beknighted teamster who drove them about their palace, old Tom Bosworth, the royal coachman, is heralded anew every spring wherever trout, salmon, bass and grayling swim around the world. Bosworth, who invented, or devised, or molded the fly known as the Royal Coachman knighted a more noble creation than any man titled by the Queen Regent herself.

Fly fishing is an art. Talented fly fishermen are artists in their own right. But, as "Sunday" painting invites the masses, so does fly fishing invite the world. Every city, town and hamlet has its champion fisherman. In larger communities, cliques have their champions and no less than 50 people have been nominated to this writer in two weeks as "the greatest fly fisherman in the world." Maybe one of them is the greatest, but the job of elimination would be hard.

Surely, of fishermen anywhere, Bill Richardson, a cop in Ogden, Utah, would rank very high. Since 1900, Bill has fished almost every trout stream in

A Flying Sportsman feature

By BOB ARENTZ



TYER'S gear includes vise, bobbin, hackle pliers, scissors, etc.



WINGS of fly are tied over top of hook, eighth-inch behind eye



TAIL of hackle fibers (from gamecock) tied parallel to shank



BODY material is wound toward base of wings, tied, surplus cut

TYER Schneider says "Hackle makes fly float, gives balance"

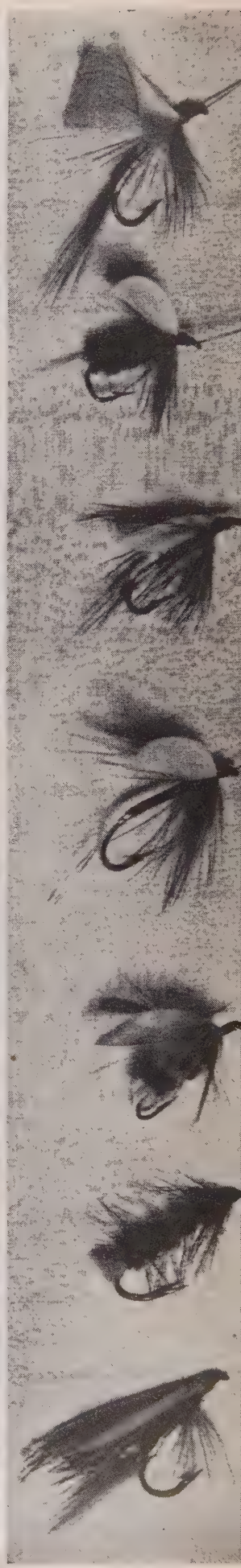
HACKLE is then wound clockwise in front and back of wings



KNOT is then tied at the head of the fly with handy whip finisher



FLY FINI, the fly tyer proudly adds it to collection of killers





the Rocky Mountains—and taken fish from all.

Bill is a purist who ties his own flies, makes his own rods, machines the working parts of his reels and studies the streams and lakes as carefully as a master painter studies the inspiration of his brush.

He has learned to catch fish when they are feeding and also to catch them when they're not feeding . . . that's harder. In fact, that's how you tell a fisherman, brother—he's the guy who's got the fish.

Every fisherman's friends have legions of stories about him. I'll have to tell you about Bill, because I happen to know him best.

One day at West Thumb in Yellowstone Park there were dozens of people futilely trying to catch the fish that were jumping by the thousands in the shallow shore waters. Every type and kind of lure was in use but the trout weren't having any.

Bill didn't wet his line. He left the pole packed and started browsing along the lake shore. Under some rocks he found a little black gnat that he had never seen before. There was hardly anything to it—wings that you hardly saw, a skinny, underfed thin shank of a body and that was all. Fish bait? Bill dug out his fly-tying kit.

He took his smallest black hook, wrapped some skinny black thread and some black hackle around its shank and fashioned what he admitted to be the sorriest-looking fly he had ever laid his eyes on.

Then, while people who had paid license fees for fish they couldn't catch stood idly by, Bill caught

APRIL & MAY, throughout the U. S., means opening of the trout fishing season. Expert anglers like Clyde Ormond (below) get out their fly rods and head for the trout streams. Many fly miles cross-country to fish



enough fish to provide a dozen campers with their anticipated supper. Naturally a ranger had to spoil the fun, but that little fly was passed on by Bill and passed around some more, until by actual count it had caught over 100 trout that afternoon. Bill says he never saw any fly like it, and has never caught a fish on one like it since—but that's what I meant about how to tell a fisherman from yokels like me—he's the guy who catches the fish.

Nobody knows how many flies there are. Possibly a crew of workers, with nation-wide cooperation would be able to catalog 10,000 brands, kinds and varieties, but any fisherman will reckon the total, with the infinite mutations of standard brands, to run into the hundreds of thousands.

Basically, however, about 500 will cover the roster for what you might call standard flies, while most fishermen, if at all serious, will have a working familiarity with 50 or 60. Some, who contend that it's the man who counts, will carry 12 or 15 known "killers" in half a dozen hook sizes, and regularly get their limits in most water.

The man's choice of his 10 "most important" flies will vary with every angler—but several consistently turn up on most—but not all—lists. First among them seems to be the gaudy and popular "Salmon" flies, such as Royal Coachman, Thunder And Lightning, Lord Baltimore, Silver Doctor and such, with less spectacular flies like the Grey Hackle, the Yellow-Bodied Grey Hackle, the Black Gnat, the Trout Fly, the Ginger Quill, the Woolie Worm, and Western Bee rating too.

Strangely enough, although fly tying is a me-

ticulous job for dextrous fingers, one of the all-time great fly-tying sportsmen was one-armed Fred Wilson, who did his work in Ogden and invented such sure "killers" (as they call them) as the Mormon Girl, the Trout Fly, the Jack Browning, and the Red Ant. Another Ogden man, Joe Hunt, devised one excellent "killer," the Western Bee, and Bill Richardson, like all inveterate fly-tyers probably has developed more experimental flies than he can hope to recall.

However, two of his flies have proved themselves among the best of the "killers," the Richardson Dude, a bright, gaudy Salmon fly that seems to infuriate fish, which fight it rather than try to dine on it, and the Yellowstone Gnat, another variation of the myriad variations of the Gnat.

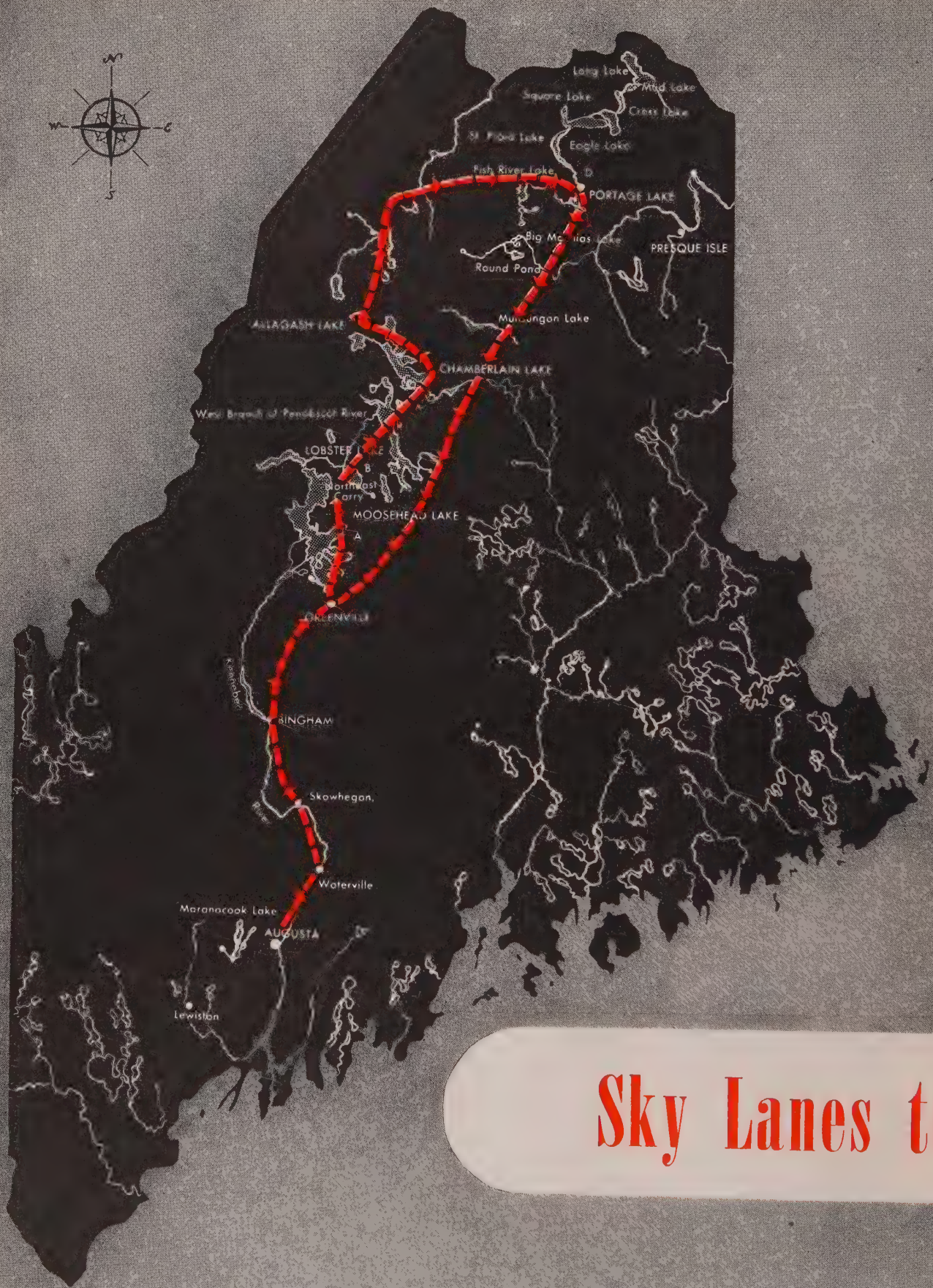
Among the best of the western wet flies, and possibly the most effective *one* fly of them all when handled by an expert, is the Woolie Worm, a fly invented in 1939 by Don Martinez of West Yellowstone, Montana, and used by the hundreds. Strangely enough, fly-tying is like any other form of inventing—one guy in Kalamazoo invents a new hot-cake turner and some kind bloke in Timbuktoo applies for a patent on the same thing simultaneously. . . . Richardson tied a Woolie Worm in 1939 before he ever saw or heard tell of the identical Woolie Worm tied earlier by Martinez.

It has a black, plain body, with a red tail and sparse grey hackle and is fished as a nymph on a river—cast, let settle, then retrieved slowly from a foot beneath the surface.

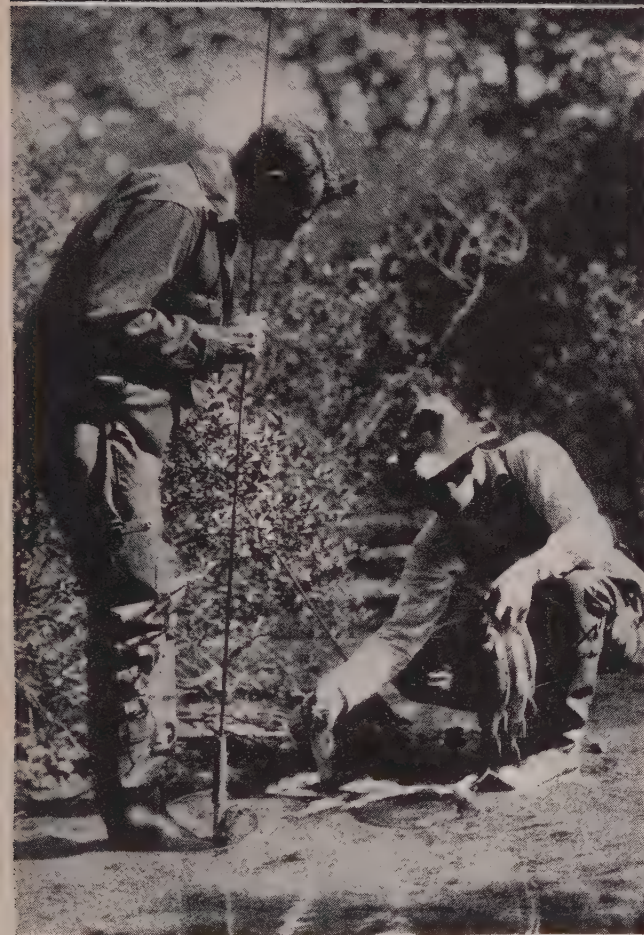
A similar fly invented (Continued on page 62)

FISHING the lake rises calls for real sharp-shooting with a fly rod. Favorite fish to go after is the fighting rainbow





Sky Lanes to



An aerial sight-seeing trip shows up Maine's well-stocked lakes and rivers

By BOB ELLIOT

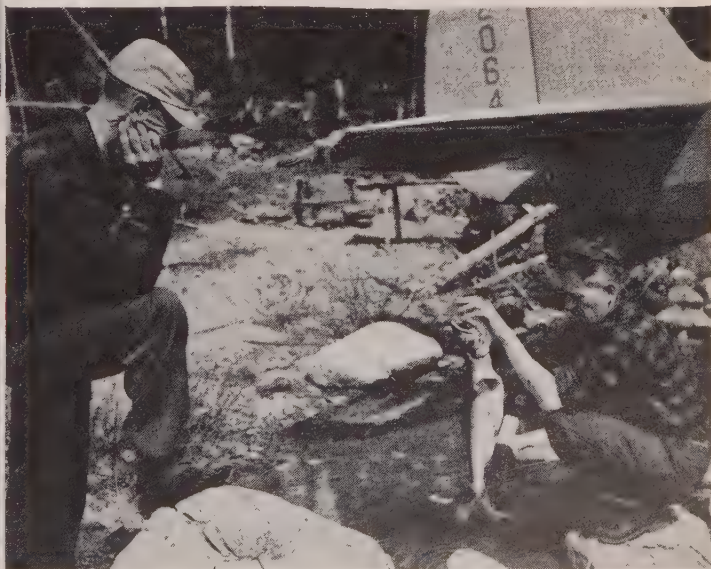
LAST fall, at the height of Maine's glorious fall foliage, Wayne Buxton and I were commissioned to take an air motion picture in color of the widely known Allagash trip through Piscataquis and Aroostook counties in northern Maine. Our film was supposed to show the main Allagash route as well as all side trips possible to fishermen employing guides and canoes. (Depending on guides, water conditions and time available, this trip ordinarily takes from two weeks to a month or more by canvas craft and paddle or setting pole. We covered the entire remote, inaccessible area in just two days, flying about eight hours each day.)

From the air we were able to view hundreds of ponds, lakes and rivers that are literally teeming with squaretail trout, salmon, togue and small-mouth black bass. While we did not stop long enough to fish any of them, it seems worthwhile to record a few facts in regard to these isolated waters with particular emphasis on the extraordinary angling to be had there by flying sportsmen.

Before somebody pops up with a remark to the effect that an ordinary flying fisherman could not make this trip, let it be said that a large number already have done so and an even larger number are scheduled to fly in to take advantage of some of this unusual angling, particularly the trout and

STATE OF MAINE offers fishermen just about the best in angling, whether it's lake or stream fishing, fly or bait fishing. Charter operators do good business during the summer months flying anglers into remote fishing areas

SQUARETAILS





EARLY SPRING finds salmon and trout very active. Because of inaccessibility, some streams are unfished



BROOK TROUT that weigh up to six and eight pounds have been taken from Maine's many lakes and streams

togue fishing. (Salmon and bass lakes are easier to reach in many instances.)

Three charter-plane concerns—one operated by Ray O'Donnell, another by Hollis Crowley and a third by a Mr. Folsom—are located at Greenville on Moosehead Lake and can be hired to take fishermen anywhere in the region. There are other flying services at strategic points. This is pontoon country but landing fields also are located at many points. For example, a landplane could come in at Portland, Auburn, Augusta, Waterville, Bangor, Old Town, Millinocket, Houlton, Presque Isle, Caribou and Fort Kent, traveling along the northeastern border to the top of Maine. Or, by flying northwest from Waterville, a fisherman could land at Skowhegan, Rangeley and Jackman to try his luck in western Maine. Pontoons are advisable, never-

theless. There are many lakes and ponds in the area under consideration and the best of them are reached by canoe or seaplane.

We started our picture at Maranocook Lake, not far from the state capital, and followed the Kennebec River to Moosehead Lake. Bill Turgeon was our pilot. Maine's Inland Fisheries and Game Department has several warden-pilots but Turgeon assumes leading role. During open-water months he flies a Stinson monoplane equipped with pontoons. It is Bill's job to stock hundreds of remote ponds and lakes with the Stinson. On smaller ponds, where the big ship cannot land, Bill uses *Cubs*.

Sleepy Atkins, whose father guided Teddy Roosevelt on hunts, assists Turgeon in stocking waters in his district. He is based at Portage, in northern part of Maine. *(Continued on page 60)*

MEN, YOUNG AND OLD, travel for miles to get to the fertile streams and lakes for a session of spring or summer angling. A great many of the best streams can be reached only by airplane or by arduous week-long canoe trips





Plane Makes Possible One-Day 150-Mile Fishing Trip

Flying Sportsman is Offered New Handy Equipment

Pocket Water Supply

Safe drinking water is one of the first requirements for a pleasant camping trip. The hunter or fisherman who haunts isolated areas need no longer boil his water before drinking it. A pocket-size filter plant, called "Mini-filter," is now available to travelers to insure safe drinking water any place. The filter operates on the same principle as that used by municipal filter plants, and altogether weighs less than 5 pounds.

Central Heating With Sleeves

Did you ever see a portable furnace? Your body is one if you use the proper insulation. The Alaska Jacket, with its goose-down filling, suits the purpose perfectly. The quilted lining keeps you toasty warm at even zero temperatures, and the "Zelan" treated fabric wards off rain and wind. The jacket is made by the Alaska Sleeping Bag Company, who know how to make snug yet free-action garments. Weighs only 36 ounces.

Campfire Commissary

About the time sportsman pilots are ready to go flying to camping spots en masse, their wives start locking up the china closet. So along come Tupper Plastics with the answer for hungry husbands who have been domesticated to the point where they feel uncomfortable eating from the pot with their bare hands.

Tupper's Poly-T tumblers, cups, saucers, dishes, bowls, etc., are designed to stack, thus taking up a minimum of space, are feather-light, and are of non-rigid construction. The plastic of which this tableware is made proved itself during the war as an indestructible covering for assault wire providing lines of communication. It is impervious to

temperature changes, and is particularly suited to deep-freeze preservation. The ideal dish for the flying sportsman who likes to eat too.

Camera With Wings

Though not yet a "built-in" the new Printex Press Camera was designed as an aircraft accessory, and patterned after war-proved aerial camera designs. It has no bellows for the wind to cave-in, and all movements and adjustments are inside the case. The case is of magnesium alloy, and is both lightweight and compact. Comes in 2½x3¼ and 4x5 models. The 4x5 model accepts a 3½-inch wide-angle lens, or you can reverse the lens-board and use a 6- or 6½-inch standard lens. Optional flat lens-board accepts 5 to 5½-inch lenses.

Minnesota Welcomes Flyers

Headquarters of a great wilderness area getting ready for the flying sportsman is Duluth, Minnesota, at the head of Lake Superior. Duluth has an airport with surfaced runways long enough for nearly anything on wings, and a seaplane base called Sky Harbor has recently opened. It is not surprising to see a deer stray onto the airport, and ducks and float planes jockey for position on the waters of Sky Harbor. For journeying into Canada, Customs and Immigration facilities are available here, along with CAA Communications and a Weather Bureau.

Here the sportsman will find ducks in early fall, deer and bear hunting in early winter, ice fishing and winter sports while the ground is frozen, and fishing aplenty come spring. With all this available, Duluth expects to see every sportsman pilot in the country sooner or later.

Plane Replaces Auto to Extend Fishing Time

In the summer a man's fancy may turn to a day or two of salt-water fishing. In past years we have made numerous long, hot, dusty trips by auto to various points on the North Carolina coast in an effort to lure the fish from the briny deep. This year we decided to make a sporting pilgrimage to the coast by air. After storing our rods and fishing boxes in the baggage compartment of our *Erco* one Saturday, we flew in the early morning air for 150 miles to Morehead City, N. C. We found the trip by air, in comparison to the auto trip, almost unbelievable in comfort and scenery, with flying time only one hour and 10 minutes, against over three hours by car.

We landed at the Morehead City municipal airport shortly after 8 a. m. and were promptly advised by an airport attendant that we could obtain transportation from the airport direct to the waterfront, where boats could be obtained for "outside" fishing in the ocean or "inside" fishing in the sound. However, on this trip we were bound for Swansboro, a small fishing village up the coast, where we expected to try for sheephead around the pilings of a long bridge. Some vacationing relatives met us shortly after we landed and a few minutes later we were near Swansboro, catching sand-fiddlers for bait.

We rented a small rowboat, baited our hooks with sand-fiddlers, and relaxed in the cool shade of the big bridge. The tide was about slack, and we fished as near the heavy wooden piles which supported the bridge as possible. We knew from past experience that the wily sheephead like to feed on barnacles which attach themselves to these bridge supports. Soon I noticed my line quivering. I snatched the rod hard, and a moment later our first sheephead was flopping in the boat. Within a few minutes we landed several nice fish, then the tide changed. . . . They were much harder to catch after that, but we fished until late in the afternoon.

That night our relatives took us to the Sanitary Fish Market and Restaurant in Morehead City where we feasted on some of the finest seafood to be had in North Carolina.

Early the next morning we took off, and as we flew homeward, talked of other places we might reach by air which provide entertainment in the way of sports. We mentioned Pinehurst, the golf mecca of the South, with its fine airport almost within walking distance of five 18-hole golf courses. We thought of Currituck Sound near Elizabeth City, (N. C.), which provides waterfowl shooting in winter and bass fishing in summer.

Almost before we were aware of it, our hometown moved into view on the horizon, and we prepared for landing, thinking as we circled of how much so many people are missing, and being thankful that we are among the fortunate ones who can enjoy outdoor sports "by air."—Tom Cameron.

(Continued on page 50)

COYOTE HUNTING GOOD IN SOUTH DAKOTA



FOUR COYOTES is the result of three and one half hours' flying time for John Spader, right, of Oldham, S. Dakota. Spader reports deer plentiful in area, counted 30 one day



"To low-and-slow Dilbert a stall applies exclusively to horses!"



DILBERT



By S. H. Warner and Robert C. Osborn

AUTOMATIC STIMULATOR—If all the Dilberts who have made wheels-up landings since the retractable landing gear was invented were laid end to end, they would litter up a lot of runways. Bells, buzzers and lights have all been tried as reminders to pilots to lower their wheels, but belly landings continue. Realizing that such signals are too weak and indefinite, I have just invented a device.

This device is very simple, consisting merely of a radio altimeter with two electrical attachments. It operates automatically and will be known as the Warner Automatic Stimulator. When the altimeter registers 200 feet during the landing approach, a relay closes. This energizes an electric circuit and actuates an arm which slaps the pilot awake.

When the altimeter gets down to 50 feet, another relay closes and another circuit is energized. This one jabs a tenpenny nail up through the pilot's seat and prods him into action. There is a cut-out switch installed in the nail circuit, however, which will prevent it from being energized if the wheels are down and locked.

To obtain best results, training should start on the ground with the equipment installed in a Link Trainer and used in conjunction with a motion picture projector and loudspeaker. To begin with, a

one-reel movie should be shown of actual wheels-up landings. This should be in technicolor to bring out the red faces of the offending pilots.

Immediately after the movie, the pilot, wearing flight gear, should get into the Link for his first lesson. The loudspeaker is now turned on. As the pilot reaches 200 feet in his descent and the arm swings out and slaps him, the speaker blares out, "Don't forget to lower your gear." And when the nail starts jabbing him at 50 feet, the speaker screams, "You forgot to lower your wheels." When the pilot reaches the point where, with the loudspeaker turned off, he consistently remembers to lower his landing gear after being slapped but before being jabbed with the nail, he is ready for actual flight in a plane having this equipment.

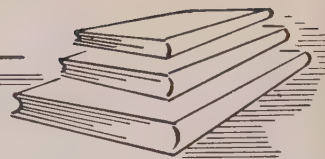
This method of training is not new. Psychologists refer to it as the "Stimulus-Response" method. It is based on elaborate tests proving that by "mental association," humans, as well as animals, can be trained to respond in a specific manner to a particular stimulus. In this case, the pilot is trained to respond to the stimulus of the slapping and prodding by lowering his wheels. When he reaches the point where his "motor reflexes" consistently cause him to do this, he is said (Continued on page 68)

"Innnntrooduuuuc the Warner Automatic Stimulator."





BOOK MART



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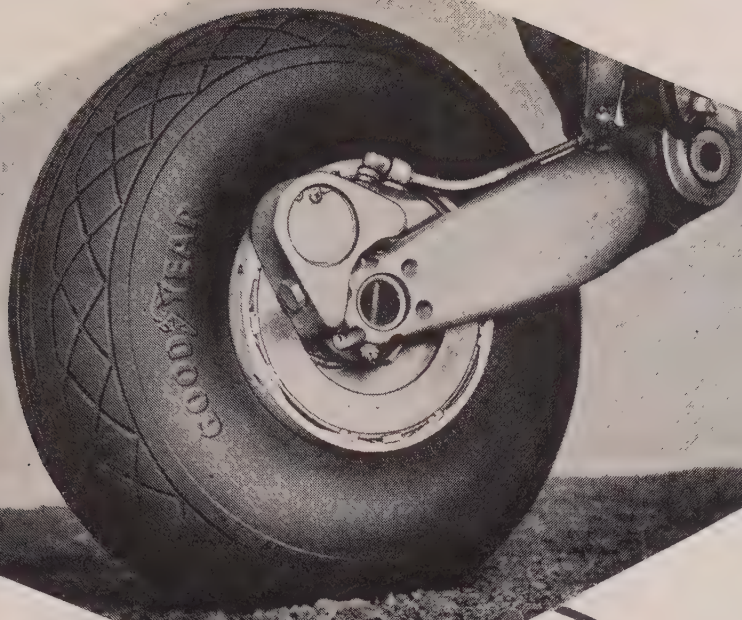
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— May, 1947, issue —



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Now fly to your favorite lake or stream and fish and hunt to your heart's content. Easily assembled on the wing of a plane. Write for the name of your nearest dealer.

Department S.K. 2

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Write for descriptive folder.

LONG LAKE CAMPS

Ed Jones Princeton, Washington County, Maine

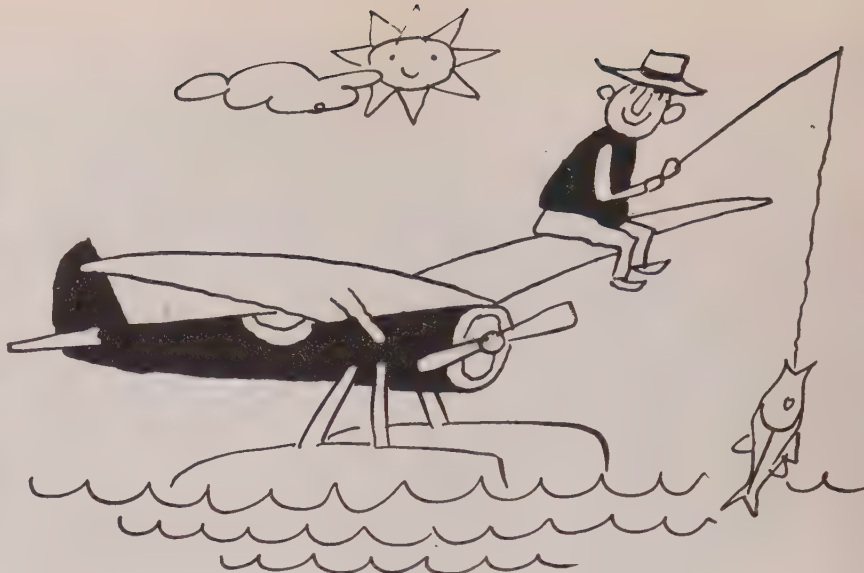


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Where to Fly

Arizona

If its good trout fishing (from May 30 to October 31), or deer, bear, duck, rabbit and quail hunting (October and November) that you want, Arizona offers the flying sportsman top-drawer activity. Safford, northeast of Phoenix, is in the heart of good trout fishing, as are Springerville, Whiteriver and Flagstaff. In the winter season, there's no better skiing than that found at Flagstaff, northwest of Phoenix. Arizona Airways, Inc., a good charter service operating out of Sky Harbor Municipal Airport at Phoenix, is available for charter flights to any of the state's fishing, hunting or skiing centers. Arizona Airways also offers a series of all-expense air-tours to the southwest's scenic points (\$35 and up, depending on length of tour). As far as scheduled airlines are concerned, both American Airlines and TWA serve Arizona, via Phoenix, Douglas and Tucson. Hotel facilities are reasonable and very good. There also are lodges, inns and ranches available for over-night, weekend or by-week or month stays. Among them is the J-A Ranch at Marvin Glenn, Arizona. This is located in the Chiricahua Mountains, just 30 miles northeast of Douglas. For further information write: Arizona Airways, Hotel Adams, Phoenix, or Arizona Aviation Service, Safford, Arizona.

Personal Pilot Information:—

Sky Harbor Municipal Airport (Phoenix)—(Cl. 4) El. 1117 feet; hard-surfaced runways; radio and homing; night operation; major and minor repair facilities. 73, 80, 91, 100 Octane fuel available. Phoenix 2.8 miles ESE (Phoenix Chart).

Wickersham Airport (Safford)—(Cl. 2) El. 3000 feet; 3 sand and loam strips, N/S, E/W and NW/SE; flood lights; wind cone. Obstructions: Poles, NW, S. Trees, S, SE. 5 hangars; major repairs; 80 Octane fuel;

storage and 24-hour service. Safford 2 miles S. (Phoenix Chart).

International Airport (Douglas)—(Cl. 3) El. 4100 feet; 3 paved runways, N/S, E/W, NW/SE; rotating beacon, beacon code, boundary, range, flood and obstruction lights on request only. Name on hangar; lighted wind cone and tee. Hangar, repairs, storage. 73, 80 Octane fuel. Obstructions: Poles, W. Hills, E. Taxi service to Douglas, 3.3 miles E. (Douglas Chart).

Arkansas

The outdoor parade leads to Arkansas where there's excellent hunting and fishing just about all year 'round. The fighting small-mouth black bass will hit your plug or dry-fly on the Buffalo River. Whopper breams are pulled from Spring Lake in the Ouachitas, or you can head for the duck blinds (in November, December and January) near Stuttgart and bag your limit. Arkansas is a flying sportsman's paradise. The Jack Tar Court Hotel officials operate a charter service out of Hot Springs and are at the present time readying their own airport for charter service to all points in the U. S., Canada and Mexico. American Airlines, Braniff or Chicago & Southern serve Arkansas via Little Rock (NE of Hot Springs). Hot Springs National Park attracts thousands of visitors who come to enjoy boating, horse racing, swimming, hiking, fishing, etc. This resort boasts 300 hotels and excellent motor courts. For additional information write Jack Tar Court Hotel, Upper Park Avenue, Hot Springs, Arkansas.

Personal Pilot Information:—

McLaughlin Municipal Field (Hot Springs)—(Cl. 3). El. 525 feet; 2 bituminous runways, 2 sod strips; navigation facilities; wind cone and lighted tetrahedron. (Continued on page 50)



"Floats MAKE REAL VACATIONS OF OUR WEEKENDS"

Say Gus and Torrance Watkins of Syosset, Long Island

A FEW HOURS out of New York, Gus and Torrance Watkins fish in a Vermont lake. Spots such as this are within easy reach on floats.

Gus and Torrance Watkins like hunting and fishing in the woods and lakes of Maine and Vermont. With a floatplane, these spots are only a few hours away from their Long Island home. By flying, they pack a week's vacation into a weekend. They find fuel costs low, travel time short, and fun in every mile of flight.

You can follow their pattern of sport. With floats, every lake is an airport, every shoreline an invitation to stop for a visit. Land right at camp site or lodge in your favor-

ite vacation spots and save travel hours for play.

No matter where you live, there is probably a float base nearby. Try a flight, to find a whole new world of sport. If you already own a plane, the quick and simple conversion to floats will give you more fun in flying, more places to go.

EDO'S BOOKLETS will tell you more about floatplanes and this thrilling type of flying. Write today for your free copies.



↑ A SNACK alongside a ready-made airport for floats. On the entire trip, the Watkinses were never more than a few miles from a water landing area.

→ VISITING a friend's lodge, Gus and Torrance borrow a dog and have good luck shooting. Quick flight home solved storage problems on birds.



THERE'S GOOD HUNTING and fishing in spots like this, which you can easily reach on floats.



EDO AIRCRAFT CORPORATION
220 Second Avenue, College Point, L. I., New York

Where To Fly

(Continued from page 48)

Obstructions — Trees—NE, Buildings—N, Hills—S. Hangar storage; major repair; 80 octane fuel. Day service. Taxi to city 3 miles SW. (Little Rock Chart).

Hot Springs Seaplane Anchorage—On Lake Hamilton—4.5 miles SSW of Hot Springs. El. 320 feet; 3-mile landing area any direction; mooring and beach. Obstructions—Bridge and power line—E. (Little Rock Chart).

Dockery Airport (Stuttgart)—(Cl. 1) El. 214 feet; 3 sod strips; navigational facilities; circle on field; wind cone. Obstructions —Trees, S, N, E, W; Pole lines—S, E; Water Tank—SE; House—N, W. 3 hangars; major repairs; storage; 73 and 80 Octane fuel available. Day service. Taxi to town, 1.5 miles NNW. (Little Rock Chart).

California

Californians claim California has everything . . . and we're beginning to believe they're right. Certainly the state lacks nothing in the way of hunting, fishing and all other sports activities. In Southern California, sportsmen report the vicinity of Big Bear City holds all the best when it comes to trout fishing, blue gill fishing. (May 1 to October 31) and duck and deer hunting (September and October). Big Bear Lake could be called a sportsman's utopia for it offers boating, skiing, skating as well as hunting and fishing in season. The scheduled airlines (American, Southwest, TWA, United and Western Air) serve this area via Los Angeles. Western Continental Airlines, a good charter outfit, will fly you to Big Bear City or to any other hunting and fishing center. Other information (including accommodations) may be had by writing Big Bear City Airport, PO Box N, Big Bear City, or Western Continental Airlines, Grand Central Airport, Glendale.

In Northern California, fishermen claim there's no thrill like going after steelheads, trout or salmon in the streams and lakes around Lompoc (north of Santa Barbara) or Red Bluff, California. The Lompoc Flying Service is available for charter trips, as is Transcalair, operating out of San Jose Airport on King Road, and the Benna and Ward Flying Service at Red Bluff. Transcalair will fly you to Hyampom for deer, bear hunting in season, or for salmon, trout and bass fishing. This charter service also will fly you to Weaverville for all types of game hunting, or to Eureka for fresh or salt water fishing. If it's golf, riding or mountain climbing you want, Transcalair will take you to Tahoe Sky Harbor or Gaberville. All of these spots are choice ones for the flying sportsman. A letter to either Lompoc Flying Service, Lompoc, California, or Transcalair, King Road, San Jose, or Benna and Ward Flying Service, Bidwell Field, Red Bluff, California, will bring you enough detailed information about hunting, fishing . . . and lodging accommodations . . . to make you want to go right away. By the way, at Bidwell Airport the Riverside Auto Court caters to pilots.

Personal Pilot Information:—

Big Bear City Airport (San Bernardino)—(Cl. 1) El. 6850 feet; bare strip E/W. Obstructions—Trees. No data on service, etc. (Los Angeles Chart).

Grand Central Airport (Glendale)—(Cl. 4) El. 480 feet; cement runway NW/SE, concrete and bituminous runway NW/SE; Navigational facilities; range, contact, runway and flood lights. Field landing lights operate on call only. Lighted wind tee. Obstructions: Buildings and poles—SE. 6 Hangars; control tower; weather bureau; major repairs. 73, 83, 91 and 100 Octane fuel available. Storage and 24-hour service. Bus, taxi, interurban electric railway* to Glendale, NW 2.2 miles. (Los Angeles Chart).

Lompoc Airport—(Cl. 1) El. 200 feet; 2 bare strips E/W, NW/SE; 2 hangars; 73 Octane fuel available. Taxi or private car to town, 2.5 miles E. (San Francisco Chart).

San Jose Airport—(Cl. 1) El. 70 feet; bare strip NW/SE. Wind Cone. Obstructions: Power lines—S. Hangar, 80 Octane gas available. Taxi or private car to city 2 miles NW. (San Francisco Chart).

Hyampom—Grass strip across from Post Office. No service data available.

Weaverville Airport—(Cl. 1) El. 2040 feet; 2 rock-loom strips NNE/SSW and NW/SE. Field hazardous due to steep gradient of strips. X-shape. Navigation facilities: circle on field; wind cone. Obstructions: Trees—NW; Ridge—SW; Mountain—SE; Power poles—S. Hangar; 73 Octane gas available. Day service. Private car to city 1 mile SSE. Field is operated by U.S.F.S. (Mt. Shasta Chart).

Humboldt County Airport (Eureka)—(Cl. 1) El. 10 feet; 2 loam and sod strips, NW/SE and ENE/WSW. Wind cone and tee; Obstructions: Trees—E, Radio tower—SW, Tele—NW. Minor repairs; 73 Octane fuel. Day service. Taxi available to city 3.6 miles ENE. (Mt. Shasta Chart).

Bidwell Airport (Red Bluff)—(Cl. 3) El. 350 feet; 2 bituminous runways, N/S and E/W; Rotating beacon, course, boundary, runway and obstruction lights operate on call; Wind cone and lighted tee. Obstructions: Poles—E; Lines—W. Hangar, weather bureau; 80, 81 and 100 Octane gas. 24-hour service. Private car to town 1.7 miles SSW. (Mt. Shasta Chart).

Colorado

Between April 10 and October 31 rod-and-reel sportsmen from almost every state in the union head Colorado way. Sportsmen fly in via Braniff, Continental, United or Western Air Lines and then use Monarch Air Lines, Inc., to get them to the state's bountiful fishing waters near Salida, Gunnison, Granby and Durango. In the fall season (October, November) Monarch ferries hunters to Craig, Rifle, Gunnison, Durango and Salida for a go at some of the country's finest deer and elk hunting. Good hotel accommodations are available at all of these

(Continued on page 78)

Sports News

(Continued from page 43)

Eagle Hunter Shoots From Plane

Hunting eagles is J. O. Casparis's job out in Brewster County, Texas. Texas sheep men pay him to keep their ranges free from the destructive birds. One sheep man lost 500 lambs to the golden eagle in a period of 60 days, then called on Casparis and his plane.

Casparis shoots the birds, whose wingspread of 10 feet makes picking up a lamb a cinch, from an altitude of 100 to 300 feet, in a dive. Using a 12-gauge sawed-off shotgun loaded with No. 4 shot, he shot 1,000 eagles in 1945, and 867 in 1946.—Melba Klaus



WINTER'S KILL shown by Wayne Adkins and wife, Elmo, Mo. She flies, he shoots

Sportsmen Fly South of the Border

A popular fisherman's tour to Puerto Penasco, Mexico, has recently been inaugurated by Hillman Travel Service, Inc., of Santa Ana, California. The trip is made in a twin-engine Cessna, and includes complete accommodations for a party of four for three days. A flat rate covers the round trip, two nights in the Hotel Penasco, a private boat for a full day's fishing, and a Mexico tourist card and angling license. All flights are initiated and terminated from the airport of the customers' selection.

Flight to Anything

The East Coast Aviation Corporation, with the welfare of busy Bostonians at heart, inaugurated skiing flights to Manchester, Vermont, in January. The trip, which normally takes all day by auto or train thus making it impossible for Bostonians, with only a week end to spare, takes just 90 minutes in the Corporation's twin-engine Cessna. And when summer comes, the same trip will be converted to a golfing outing, with reservations at the individual's favorite lodge arranged by East Coast Aviation.

BIG GAME hounds aid L. L. Lewis, Central Point, Ore., in hunting cougar and bear



**STATIC-FREE V-H-F
TRANSMISSION
CRYSTAL-CLEAR
L-F RECEPTION**

Choose a unit . . . or a system

AVA-31-A

All-position, aircraft-type microphone.

AVA-35 and AVA-57

Lightweight headphones.

AVA-38

Simultaneous radio-range filter.

AVR-104

L-f receiver, 200-415 kc.

AVT-114

V-h-f transmitter. Crystal-controlled, 121.5-123 Mc. Complete with power supply and whip antenna.

AVA-127

Power supply . . . with audio system for loudspeaker and modulator service. Operates from 6-, 12-, or 24-volt batteries.

AVA-129

Loop antenna . . . complete with hand-wheel and azimuth scale.

MI-19548

Dry-battery pack for AVR-104 receiver.



RCA Loop Antenna

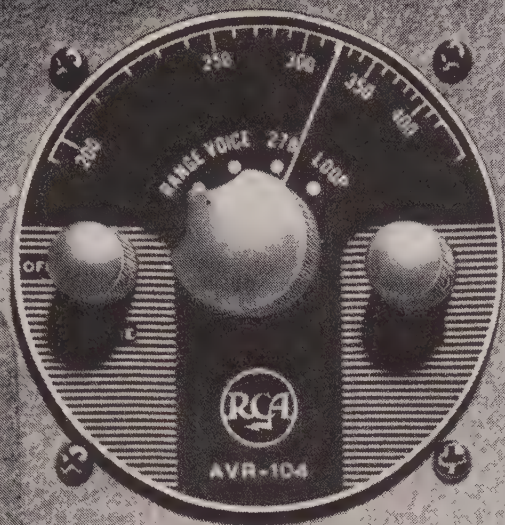
AVA-129 for radio direction-finding and air navigation.



AVIATION SECTION

RADIO CORPORATION of AMERICA
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N.J.

In Canada: RCA VICTOR Company Limited, Montreal



For reliable communication . . . use an RCA . . . the complete 2-way radio for personal planes

For 2-way communication performance equal to airline service, here's your personal plane radio. It's compact. It's flexible. It's complete . . . right down to its interphone system.

Here are just a few of the features

A single-control v-h-f transmitter delivers 6 watts of 100 per cent modulated power on any one of 6 different static-free channels (you select your transmitter frequency . . . or interphone . . . at the turn of a switch). A high-sensitivity type super-

heterodyne receiver, with built-in range filter, brings in radio range, weather, and traffic-control stations strong and clear. A lightweight rotatable loop antenna provides accurate direction-finding for air navigation. A separate low-drain power supply completes the system.

For the facts about this outstanding 2-way personal plane radio . . . the radio that fits into any standard 3-inch opening on your instrument panel, write RCA, Aviation Section, Dept. 89-E, Camden, New Jersey.

Air-Minded Executive

(Continued from page 20)

thermometers for indoor and outdoor temperatures. There was even a crank attached to revolving mirrors outside the windows so the Major could inspect the engine and roadbed if he so desired.

Fleischmann's desire for the finest and the unusual has been carried over to his executive plane. The *Lodestar* is beautifully furnished, excellently appointed and for the entertainment of the passengers there is just about every gadget within the cabin itself that any air-minded person would desire.

No one seems certain how the private railroad car fad began just as no one seems certain today who was the first executive to have his own plane.

President Abraham Lincoln had a private railway car and so did Queen Victoria. They were decorated in all the baroque taste of the day—Lincoln's being noteworthy in that it was completely armor plated. He rode it only a few times before it became his funeral coach.

Of course, George M. Pullman, founder of the company which today bears his name, owned his own private car and so did P. T. Barnum of circus fame. Barnum's car, a lavishly furnished mansion on wheels, was painted lemon yellow and attracted much attention, even when it was attached to the end of a gayly decorated circus train.

Few men of fabulous wealth escaped the urge to own a railway car of their own. John D. Rockefeller, Jr., and J. P. Morgan never owned one, but Henry Ford, Eugene Grace, Charles M. Schwab, Harry F. Sinclair, Harry Payne Whitney, Edward F. Hutton, John J. Raskob, J. S. Cosden, Jacob Replegle, the Mellon family, Paul Block, Joseph E. Weidner and a number of others did.

A private railway car was expensive to buy and expensive to maintain. The car itself cost about \$100,000 plus whatever the tycoon cared to toss in for the furnishings, gadgets and doodads he desired. The maintenance cost was better than \$200 a day.

The executive plane also costs a sizable piece of change—and the maintenance costs are usually heavy, too.

The Douglas DC-3C executive "flying office" plane sells for \$115,000, while the Lockheed *Lodestar* brings \$111,000. Several other companies, such as Stinson, North American, Beech, Republic, Bellanca and Grumman have or soon will have planes in the \$6,000 to \$60,000 class for business flying.

North American, which sells the four-place *Navion* for \$7,750 claims it can "show any firm with a \$60,000 business that an airplane will make money for the company."

Beech aircraft, which has sold more than 300 of the \$60,000 executive-type twin-engine planes since the war's end, also sells a four-place *Bonanza* for \$7,975.

Upkeep and maintenance of these planes vary, of course, with the type. And the pilot's salary is another item that must be included in the figures.

But while the private railway car was in many cases a luxury item, the executive plane is, in most cases, a matter of business. For instance, the B. F. Goodrich Company in Akron, Ohio, states that its *Lodestar* twin-engine, 10-passenger company plane, purchased in 1945, paid for itself within two months in time saved in emergency travel.

During the first year in Goodrich service the company's *Lodestar* flew more than 500 hours, covered more than 112,000 miles and transported 882 passengers. During the 12-month period the plane operated over 24 states, Canada and Mexico and made one non-stop flight from Washington, D. C., to Havana, Cuba. Goodrich now has two executive planes in service, the second being a twin-engine Beechcraft which was put into operation in March, 1946.

Lodestars are popular as executive planes. In addition to Goodrich, other companies using them for executives include Bethlehem Steel, Celanese, Chicago Tribune, Jacqueline Cochran, Columbian Petroleum, Fairbanks, Morse and Company, Fleischmann Yeast, Fruehauf Trailer, Gannet Company, General Electric, Goodyear, Gulf Oil, Hercules Powder, Johnson and Johnson, Walker Inman, Kollsman Instruments, Lambert, Clayton Lemon, Lever Brothers, Manufacturers Trust, Maybee Oil and Gas, McMillan Petroleum, National Dairies Products, Oregon Shipbuilding, Owens-Corning Fiberglass, Petan, Republic Steel, Republic Oil Refining, Reynolds Metal, Sinclair Refining, Standard Brands, Standard Gas and Electric,

den to indoctrinate them. In addition to visiting the plant, the jobber-salesmen attend sales promotion meetings.

The Hollingshead firm expects a minimum increase of \$1,800,000 yearly in its sales to result from the closer relationship between salesman and the home office. Before the war Hollingshead brought salesmen to the plant by train, but with its company plane its radius has been extended from 150 miles to nearly 1,000 miles—and the salesmen can be back in their home territories within a few days if necessary.

One of the enthusiastic users of the company plane is the Gulf Oil Co. Major Al Williams, head of Gulf's aviation department and noted flyer in his own right, points out that "American industries have learned from World War II the importance of fast transportation for its top executives. During the war General Eisenhower depended upon a standby squadron of high-speed transports to bring field generals from distant battle fronts to his headquarters for important conferences. He, too, was able to fly to key points for other sessions. By utilizing Eisenhower's idea, Gulf is using its DC-3C's to narrow the gap between its front sales lines and headquarters. This will mean greater efficiency, smoother operations."

Most ardent of the air-minded executives at Bethlehem Steel is board chairman Eugene G. Grace, himself. He flies several times weekly and likes to take over the controls once the plane is in the air.

The Weirton (W. Va.) Steel Company's company plane provides the vital link between Weirton and the nation's principal cities. For example, New York City, the world's greatest buying center, is just 100 minutes away, while the nation's capital in Washington is only 50 minutes distant. From Weirton it takes only 3 hours 10 minutes to fly the 560 miles to St. Louis, while Chicago, 425 miles west, is 2 hours 25 minutes by air from the Weirton general office. Detroit, Cincinnati and Philadelphia, all cities where Weirton does business, are now less than 90 minutes away.

The Lever Brothers' plane, a Lockheed *Lodestar* purchased in early 1946 by Lever's youthful, air-minded president Charles Luckman, to bring the Cambridge main offices into closer contact with Lever plants across the country, was the occasion for no little ceremony last spring.

The christening of the plane took place during the visit to the United States last June of Viscount Leverhulme, head of Lever International, and his wife. Because it was named in her honor, Viscountess Leverhulme christened the plane "Ladylever" by smashing a bottle of champagne on its nose, as Lever executives and employees looked on at the Wiggins Airways Field in Boston.

The Lever plane was put to good use during the 1946 Christmas-New Year holiday season when three Pepsodent Divisions officials flew to sales meetings in Dallas, Atlanta and New York on successive days. The trio, (see photo page 20) James A. Barnett, vice-president and general manager; George R. Stege, Jr., director of sales; and Leslie A. Sauers, national field sales manager, left Chicago on Friday and flew to Dallas. From the Texas city they went to Atlanta and New York—and they were back at their Chicago desks by Tuesday morning.

"In today's business world," Mr. Barnett

(Continued on page 79)



Standard Oil, Superior Oil, Texas Oil, Time Magazine, Union Oil, C. R. Vose, Warren Petroleum, Weatherhead and Weirton Steel.

Among those who have purchased the new Douglas DC-3C executive model plane (which are rebuilt C-47's) are the McCarthy Oil and Gas Corp., the R. F. Hollingshead Corp., United Aircraft Corp., Hearst Corp., the Swiftlite Aircraft Corp., Gulf Oil Co., Texas Co., Gar Wood and Atlas Corp.

In the spacious DC-3C cabin, triple-insulated against sound, are seating accommodations for 18 passengers. Two wide divans, which may be converted into full-sized sleeping berths, are placed along opposite walls at the forward end of the cabin. Directly aft of the divans are deeply-cushioned arm chairs arranged with four pairs on the right and four single seats on the left side of the wide aisle. An optional arrangement provides four convertible divans and six instead of 12 chairs. Both arrangements have a conference or card table seating four, a writing desk, a broadcast receiver, a magazine rack, a clock and baggage room and an airline buffet for serving hot or cold meals. A completely equipped washroom occupies the aft end of the cabin.

A DC-3C company plane is being used by the R. M. Hollingshead Corporation of Camden, N. J., to promote (page Mr. Ripley) sales of automotive products.

A firm believer in the bewhiskered sales maxim, "the more you tell, the more you sell," Hollingshead is flying sales personnel from different localities every week to Cam-

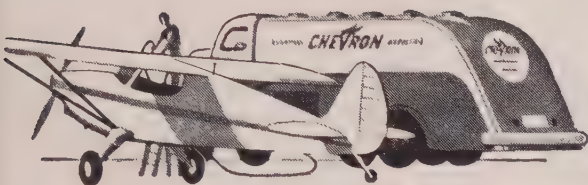
STANDARD OF CALIFORNIA'S

PLANE FAX



A page of service tips for private flyers and fixed-base operators

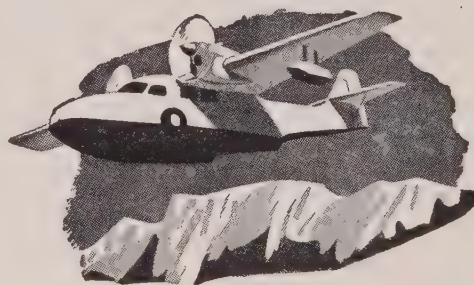
Lead deposits cause of frequent spark-plug fouling



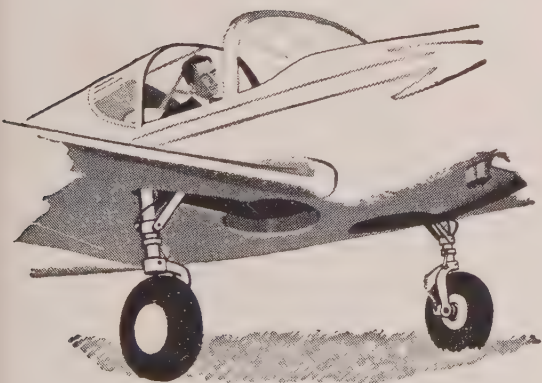
In order to boost octane rating of some aviation gasolines to 80, tetraethyl lead is added to the fuel. In light plane engines this sometimes results in lead fouling on spark plugs. As a result spark plugs must be cleaned frequently to prevent failure. To eliminate this and other difficulties, Standard of California was a leader in producing unleaded 80-octane aviation gasoline which was enthusiastically welcomed by light plane operators. Chevron Aviation Gasoline 80 is recommended for virtually all engines under 450 horsepower.

"RPM" reduces costs for Alaska Coastal Airlines

"Since changing to RPM Aviation Oil our engines are in much better condition at overhaul time than ever before," writes O. F. Benecke of Alaska Coastal Airlines. "We have also found that we may operate our engines for longer periods between overhauls on RPM Aviation Oil. We have been able to increase this time to over 800 hours and find engines in such excellent shape that overhaul periods may be extended to even longer periods... oil consumption remains low, starting is readily accomplished and there is a noticeable lack of foaming."



How to pick the right hydraulic oil for your plane



Standard of California has perfected three petroleum oils for hydraulic systems, struts and brakes with synthetic rubber seals. RPM Aviation Hydraulic Oil No. 1 has proper viscosity to minimize leakage, and is recommended for personal planes. RPM Aviation Hydraulic Oil No. 2 is lower in viscosity and is designed for use at temperatures below minus 40° F. RPM Aviation Hydraulic Oil No. 3 is similar to No. 2, but its anti-corrosive compound makes it valuable in protecting hydraulic systems in storage.

CHEVRON NATIONAL CREDIT CARDS are good at airports throughout the United States and Canada. Ask your Standard Airport Dealer in the West...or write to Standard of California, 225 Bush St., Room 1618, San Francisco 20, Cal.



Pilot's Report . . . Canuck

(Continued from page 22)

the proverbial balloon in a breeze. Instead, however, the *Canuck* behaved like a lady and rode the rough air like a heavier ship. She responded quickly to finger-tip control and at times, despite the strong gusts, flew evenly and smoothly on just trim control.

I tucked this little glad note in my book, then resolved to at least partially upset the salesman's boastful attitude by flying the ship over the Niagara River. Never in all my flying have I ever crossed the Niagara when the air currents didn't give me a ride for my money. It was rough this time, too, but I'll have to admit that the *Canuck* took it with a great deal more poise . . . and less need for control . . . than I'd ever before experienced in any other plane. The salesman still wore his "I-told-you-so" smirk.

The stability of the ship is outstanding. Designed to take the British requirement of seven G's, it has withstood exhaustive tests. (U.S. has no G requirement for personal planes. A ship is stressed for certain maneuvers and is tested in these according to manufacturer's recommendation.) Too, it can do all the necessary acrobatics called for in U.S. and Canadian airworthiness tests. In trimmed flight the plane can be controlled laterally and directionally by ailerons alone, by rudder alone, or . . . by a third and most unconventional method of simply manipulating the doors.

Satisfied with that part of the *Canuck's* stability, we climbed to about 5,000 feet for a test of her spin qualities. I cut back on the throttle, pulled her nose up a bit . . . and waited. The *Canuck* held her nose high, then slowly dropped into an easy stall. She had no tendency to drop a wing and go into a spin. In fact, not until I decisively crossed controls could she be induced to spin. And then, after I'd released all controls, right smack back out she came. There's no shyness in the *Canuck* at all.

In spin tests made by the official Fleet test pilot, 125 pounds of lead were loaded into the ship at a point 50 inches behind the center of gravity. Despite this load, the *Canuck* came out of a 15-turn spin in less than two turns . . . and with hands off! The ship will fly level at 3 mph above stall speed (45 mph). Just prior to a stall I noticed a little tail buffeting which gave warning of what was coming. After that the nose dropped slightly. I tried several power-on stalls and the plane recovered from them in every case with a loss of altitude of less than 50 feet.

Happy about the whole thing and now assured of the *Canuck's* inherent good characteristics, I headed back to the field. By this time the salesman had added a nonchalant whistle to his "I-told-you-so" smile.

Coming in for a landing at the Fleet field, the low-nose feature of the plane again gave me an unrestricted view from the cockpit—this time of the runway right down through to the flareout. I bounced in on the first landing, but the sturdy gear of the ship absorbed most of the shock. To appease my conscience, I pulled the ship off again, went around and then came in as a polite pilot with passenger should come in. Once back on the ramp, I climbed out of the ship, then looked her over from the points of exterior

trimness, interior design and construction.

The *Canuck* is a small aircraft, over-all length being a little over 22 feet, over-all height 7 feet and wing span, 34 feet. The ship is of metal tubular construction, fabric covered, and is finished in a variety of colors to suit the owner's taste.

And the owner's taste for trimness is amply satisfied by the interior arrangement of the *Canuck's* cabin. Probably one of the first things a person new to the *Canuck* would notice is the amount of plexiglas "skylight." This gives the pilot "up" visibility while the green of the plexiglas eliminates ultra-violet rays from the sun, thereby reducing the sunburn possibilities. The sides of the cabin are fitted with clear plexiglas from a point above the engine cowling to as far back as the end of the ship's baggage compartment, therefore allowing maximum visibility all around. In spite of the cold weather and with all this plexiglas, the C's cabin heater kept the pilot compartment warm and comfortable. For summer operations, sliding panels in the plexiglas section of the door permit good cabin ventilation.

Present models of the *Canuck* are fitted with stick control. One of the designers, however, informed me that another version, this one with wheel control from a center column, is in the planning stage. The instrument panel, on which is mounted such standard instruments as compass, airspeed indicator, ammeter, starter button, oil temperature and oil pressure indicators, altimeter, tachometer, engine primer, throttle and parking brake, is finished in gray. There is a good-sized glove compartment on the right side of the panel. This is handy for stowing such small items as maps, flashlight, etc. The trim tab is mounted overhead, and the gasoline gauge is mounted on the engine cowling, directly in front of the cabin. It is clearly visible to either pilot or passenger.

The cabin seats are welded steel tubing and plywood with foam rubber cushions. This seat is adjustable, so if you're a rather long-legged pilot, you can move the back four inches. There is a large luggage compartment, lined with leatherette, behind the pilot and passenger seats. This space will take a total of 105 pounds, assuming of course that pilot and passenger average 170 pounds each. Bulky baggage and light camping equipment will easily fit into this space.

For those long pieces of luggage, i.e., skis, fish poles, etc., that a flying sportsman will want to carry with him, there is a zipper at the rear of the luggage compartment. Unzip it . . . and the too-long ends of the

skis, fish poles, guns or what-have-you can be shoved into an allotted space at the rear of the fuselage. This being able to handle all such luggage is one of the lead points in favor of the *Canuck* as a sportsman's plane.

Fully loaded, the *Canuck* weighs 1,425 pounds. Its empty weight is 858 pounds. Standard models carry a 16-gallon (imperial) fuel tank (19.2 gals. U.S. weight), with an auxiliary 21-gallon tank (25.2 U.S. weight) available for those who want an increased range. Averaging 22 to 25 miles on a gallon of gasoline, the *Canuck's* range is about 400 miles, with a service ceiling of 12,000 feet.

To meet personal-plane requirements in northern sections of the U.S. and Canada, the *Canuck* was designed for either wheels, floats or skis. The Fleet Corporation makes its own floats and its own skis. These can be used on other light planes, too. The floats are made with one central keel of unusually heavy construction, capable of resisting heavy shock loads. On the bottom of each float there is a very wide "wearing" strip to permit dragging over rough ground, gravel or rocks without damage. This is important to the sportsman pilot who flies into and out of remote lakes and rivers for that wonderful hunting and fishing that the Dominion offers. Many of these waters are uncharted as far as the flyer is concerned, and "hidden obstacles" such as rocks, etc., are an ever-present danger.

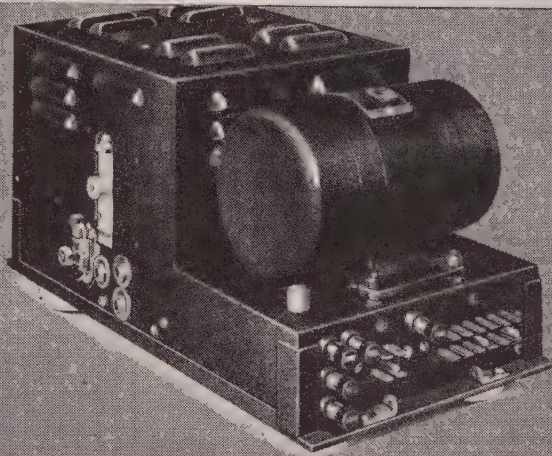
Several owners of the seaplane version of the *Canuck* have carried canoes with them on their sporting junkets to northern lakes off the highways and railways. A canoe can be attached to the *Canuck's* floats, either on one float or a canoe on either float, depending on the remainder of the load. The weight of the canoe or canoes has to be considered part of the luggage, of course. They are usually roped on securely, fastened to the tubular steel rods by which the floats are fastened to the plane itself. According to pilots who have flown the *Canuck* with a canoe fastened to a pontoon, use of the floats for this type of load has little effect on the handling of the plane—consistent with the presence of the weight (on but one side) and shape of canoes.

In the matter of skis for winter operation, the Fleet lightweight metal ski is designed to be fitted to the undercarriage without having to remove the wheels. It's a slip-on job which takes only two men to do; one to hold up the side of the plane being fitted, the other to actually place the ski under the wheel. The ski is then fastened by the shock cords to the fuselage. The *Canuck's* steerable tail wheel (made by Scott, U.S.A.) is then taken off and a tail ski fitted in its place. Operation from skis, like floats, is as good performance-wise as on wheels. And in Canada, where winter means a lot of snow and ice, skis are essential to good plane operation. Certainly it adds year-round utility.

The *Canuck* is the only Canadian-designed personal plane being produced, and its builder, the Fleet Corporation, is looking to the export market for its major sales. Agents already have been appointed throughout Canada and the United States as well as throughout the British Empire and South America. Price of the *Canuck*, fly-away factory at Fort Erie, is just under \$4,000. With its performance and utility, the ship is bound to keep the favor it already has gained.



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Any of six frequencies are right at hand in this Lear MVHT-6 transmitter. Two are in the medium frequency range—four in the very high frequencies.

So come what may, you're all set. Plenty of power too, with 12-14 watts in VHF and 48-55 watts in the medium frequencies. And all this in a transmitter that weighs only 30 pounds complete with cables and accessories.

MVHT-6 also includes a continuously variable antenna coupling which aids greatly in matching the transmitter to

the plane's antenna precisely with a standard 50 ohm coaxial cable.

This is a transmitter that can be vitally important to you. See it at your Lear Aircraft Radio Dealer.

Quick Facts About The Lear MVHT-6

- Combines medium and very high frequencies
- Covers 6210 kc., 3105 kc., 121.5 mc., 122.1 mc., 122.5 mc., 122.9 mc.
- Usable power, 12-14 watts VHF, 48-55 watts on medium frequencies
- Weight 30 pounds complete
- 14 volt or 28 volt units available



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Vanished Airman

(Continued from page 26)

plane. Sleeping bag, mosquito nets, fishing tackle, signalling device, hand compass, small axe, emergency rations, cooking utensils, and so on.

We were questioned closely concerning our planes. Two-way radio is required. The RCAF operations officer told us of lightplanes whose slow speeds (80 mph) and limited range (4 hours) had caused their owners to sit helpless on the ground for as long as *three weeks* waiting for the combination of wind and weather which would make it possible for them to reach the next field along the route. Our planes met with his approval when he learned they had a five-hour range, and that the 85-hp planes indicated 115-mph cruise whereas the 125-hp slide along at a highly satisfactory 140 mph.

Two items on the questionnaire made me gulp a little. One asked for the next of kin in case the aircraft was reported overdue or missing. The second stated coldly that it would like to know who would assume the cost of search and for how many dollars. I felt pretty lonely on that one.

Little remained but our final briefing by the operations officers.

"Understand, don't you, that if you fail to remain over the Alaska Highway en route, the Canadian government is under no obligation to search for you. That's the main error made by the lightplane pilot they failed to find. First, he left the Highway. Second, he failed to stay by his airplane! Here are the maps for your route . . . and stay over that highway! You won't hit it until you get to Fort St. John, which is your second stop from here. Now then, we will go over the route from here to Grand Prairie . . ."

While I listened to the precise instructions concerning the short hop ahead, part of my mind turned over the first authentic information on the vanished airman. He left the Highway. He failed to stay by his airplane. Where this had happened or why was still a question. Evidently, he had gone down somewhere along the Highway. That eliminated the first two legs of our journey, for the Alaska Highway did not begin until we cleared later from Fort St. John, B. C.

Between Edmonton and Grand Prairie, I began to understand why there is strict control over transient aircraft. I also learned what the term "rugged country" means. Below us spread uncountable millions of densely packed fir trees. Enormous tracts had been burned over by fire. The occasional sun glinted weirdly on the peat-like muskeg holding the skeletal forests. To land in such a place would be suicide.

During the ensuing night, which we spent in a so-called hotel in Grand Prairie, wild, weird sounds came from the swamp, now 10 miles behind us.

We were up with the sun the next morning. In the higher latitudes where the sun disappears very briefly during August nights, this meant we were up at 4 a.m. or thereabouts. Recalling the ruggedness of the land over which we had flown, all of us gave our ships a preflight inspection such as few aircraft experience in their career. Our first hop of the day was to take us into Fort St. John. All of us looked forward to it eagerly, for we knew that from St. John's to the top of the world we would be following the famed Highway. The flight into Fort St. John posed no problem. Navigation was simplified by clear radio beams. The country was no rougher than our own eastern Alleghanies. While the day was not clear, neither was our visibility materially cut by the slashing rains encountered.

Our stop in Fort St. John, where we landed at 6:30 a.m., was brief and enjoyable. The crew had been on duty 19 hours, and had just retired when we arrived. Despite this, they came to our aid with the usual Canadian courtesy and helpfulness. It was not long before we sat in the mess hall, each clutching a cup of steaming hot coffee. Once more I asked questions about the missing pilot. Had he gone down between St. John's and our next stop, Fort Nelson? No, he had not, but he would have been fortunate if such had been the case. A map was pulled out, and the statement was explained.

On the map, the black ribbon of the Highway led south of the radio ranges between St. John's and Nelson. The country did not appear rugged along the beams, as the greatest elevation shown was only 4,000 feet, and there appeared to be no peaks. Why, then, was it necessary for lightplanes to

follow the Road? We were told that the same vast tree areas covered the ground there as elsewhere, and that the country humped up into rough hills. There was no place a plane could land along the beam; whereas following the Highway meant that in case of trouble, not only could a lightplane descend safely, but the problem of locating the downed plane was simplified by the knowledge that it was somewhere along the Highway. That sounded like good sense to me. By that time I had seen enough of the swirling pines to want no close contact with them.

With a final wave of heartfelt thanks for coffee and all-around courtesy, our flight took off again. The ceiling was low, and weather reports indicated it would either stay that way or improve—it wouldn't get worse. We were not unduly worried. Navigation was suddenly simplified by the road.

Up we went to the minimal altitude allowed by the low ceiling. Sure enough, off to the left, skirting a large lake, lay the long-awaited Highway. As I looked at it, I wondered what I had been waiting for. Whatever I had in mind, this was not it. As an engineering feat, the Alaska, or—as sometimes called—the Alcan Highway, is remarkable. However, to one used to the super highways of our own country, the term "highway" in connection with this narrow unpaved road through the wilderness is something of a misnomer. The Alcan Highway cuts like a raw and ragged scar across the heart of the northwest. It is said one can land on it in an emergency, but I hope never to be forced to try it. The trees lining the road are high enough so that it is very easy to lose sight of the Highway if one deviates to left or right of its twisting course. To avoid this contingency at the low altitude at which we flew, we tagged close to one another in follow-the-leader style, keeping far enough to one side to avoid prop wash and to permit the lead pilot to crane his neck and locate each of us behind him. Thus, with many pullings-on and pushings-off of our carburetor air heaters, we made our devious way to Fort Nelson. We hugged the Highway as though our lives depended on it. And they did.

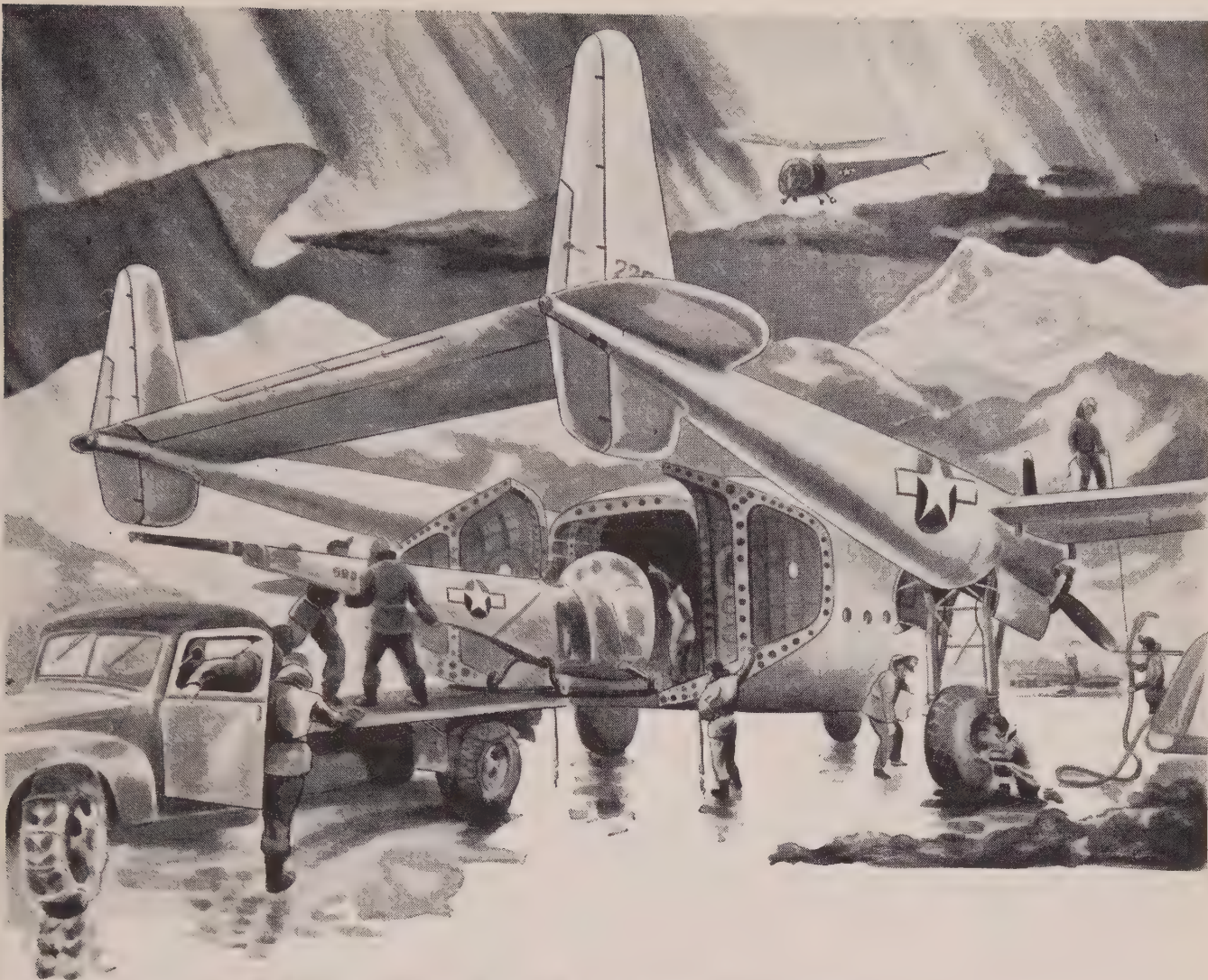
I was glad to see Fort Nelson for more reasons than one. Despite predictions, the weather began to sink while we were still miles from our destination. At times patches of cloud-become-fog obscured the Highway. We skirted these, hugging the west edge of the road as best we could.

I had an added reason for being glad to land at Nelson. Here, if anywhere, I must strike pay dirt in my search for information about the lost pilot. I was right. Both the Canadians stationed on the post and those members of our own Air Force who are still isolated in the northland, were more than willing to tell me what they knew. The newspapers might consider the case closed, but not so those at Fort Nelson.

According to reports, on the day that the missing pilot landed at Fort Nelson, it was obvious that he was in a highly nervous state. His war experience had been as pilot of a multi-engined plane. What the trip must have been like to such a pilot in a lightplane is beyond imagination. There is no way to convey here the effect of the towering menace of the mountains, the

(Continued on page 58)





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 **Fairchild Aircraft**

Division of Fairchild Engine & Airplane Corporation, Hagerstown, Maryland

Vanished Airman

(Continued from page 56)

shock of the sudden wild winds sweeping down the canyons. These canyons lie at right angles to the path of flight, and one must make his way through the violent air pouring from them. It takes only a few experiences with the insane gusts which toss you up, down and around to shake anyone's confidence. It was bad enough in an all-metal, sturdy craft such as we were flying. It must have been indescribable to the light-plane pilot. By the time he reached Fort Nelson, he had had enough. Not one, but four people told me how the pilot had paced nervously around the post, saying aloud that

he did not want to go on. This element of panic may well have had a bearing on what ensued. Think of it: the route between Nelson and the next stop is long—even longer than the usual three-hour session. In a plane of limited range, with more than limited speed, it must have been a temptation to leave the Highway where it obviously twisted back on itself, hoping thereby to fly direct, pick up the road again, and meanwhile save precious time, and precious gas. Was such the case?

In any event, the pilot decided he would go on. There were two ships traveling together. What went through the lost pilot's mind after take-off from Nelson is a matter for conjecture. The map shows that the country which had been rough hills, deep

gorges and unanticipated yawning chasms, suddenly rises up into towering peaks. No effort has been made to give specific elevations. A laconic "10,000 feet" is plastered across them on the map. There are no ranges such as characterize our mountains. It is a mad jumble. Not all of it has been surveyed. It is notable that at the point where the pilot left the Highway and headed somewhat north, the area is unmapped. It may well be that he recalled the land behind his course was rough hills rather than terrifying mountains, and that he hoped to find such hills north of the Highway. As a matter of fact, there is nothing in the uncharted area but more peaks.

Some few hours after the two ships left Fort Nelson, one arrived at the intended destination. The pilot, white-faced and drawn not only from the arduousness of his trip but the knowledge that he was flying alone, had climbed soberly from his plane, gone into RCAF operations and reported the second aircraft missing.

No time was lost in initiating a search and rescue mission. Under the direction of the RCAF, the United States AAF cooperated in a procedure used successfully many times during the war. Aircraft were dispatched to search the area where the remaining pilot reported that the missing pilot had "headed north." Bush pilots joined in the search, flying up valleys, down river beds, and high over craggy peaks in the area which seemed indicated by the pilot's report. They found nothing.

On the evening of the seventh day, a strange telegram is said to have been received from the surviving pilot who had, meanwhile, proceeded to his final destination in Alaska. No earlier report was similar to it in detail. The telegram, received one week after the first pilot became lost, said the lost pilot did *not* go off to the north, but when last seen was circling in a steep spiral a few miles off the Highway. The time elapsed since departing Nelson was given. No one expressed an opinion on whether the original full report had been as accurate and misplaced somehow, whether the remaining pilot might have suffered shock which temporarily dulled his memory, or whether he needed time to overcome a feeling of having failed to stand by, despite his own small gasoline reserve. These things are not for us to say.

The morning following receipt of the strange message, a bush pilot of exceptional repute was sent at once to search the area. Within a remarkably short time, he found the lost plane and landed beside it. The pilot, however, had vanished.

When he returned to base with his information, the bush pilot had a strange tale to tell. The lost plane was down in the only possible cleared space in the section. It was standing on its nose. There was considerable damage to the leading edge, the windshield was bashed in, the wing struts were bent. Oddly, the propeller was not damaged.

An Indian trapper, famed for his tracking ability, was brought into the area at once. No evidence was found that indicated the missing pilot had been injured in the crack up. One can only draw his own conclusions regarding the pilot's condition. These conclusions will be based on evidence gathered by the sharp, trained eyes and wits of the trapper. In the plane were found items which

(Continued on page 74)



RADIO PANEL

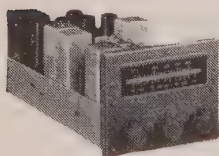
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J. DAVID FINGER (left) has been operator and manager of three airports, has operated a flying school and aircraft service for nine years and has been in aviation since 1939.

BERNARD S. CHODOS, Co-Owner and Supervisor of Flights at Westchester Airport, Inc., has been in aviation since 1937, holds a Civil Aeronautics rating for Primary and Commercial Flight Tests and helped develop The Westchester Airport Maintenance Shop.

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Sky Lanes to Squaretails

(Continued from page 42)

Both these men and other flying wardens patrol vast wilderness reaches by air, usually flying a second regular warden in each ship. In the fishing season these men check the activities of flying sportsmen or fishermen who have been flown in by plane services. In the winter, they are on the lookout for beaver trapping violations or other transgressions of game laws.

We polished the shatterproof glass of the Stinson carefully; for Wayne, who was to take the movie, had learned by experience that he could get good results if he placed his lens close to the windshield of one of the rear windows. While it was necessary that this be genuine glass, when used it acted like a filter and color shots turned out beautifully.

With only one accident in 15,000 air hours of flying over wild country, Turgeon was a good man to pilot the Stinson. (His single accident occurred several years ago when frost closed a gas tank vent on a ship that was new to him at the time. Now he is doubly cautious.) An excellent mechanic in addition to being a skilled pilot, he has suggested several acceptable ideas to manufacturers, and stood by when the Stinson was assembled to his own specifications.)

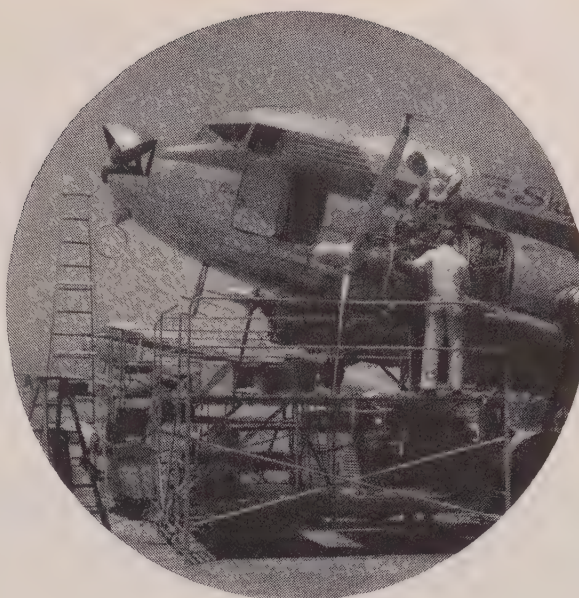
So, that October morning Bill Turgeon revved the engine and we took off, following the Kennebec River upstream to Skowhegan, Bingham and then across the mountains to Moosehead Lake (about 45 minutes in flying time). Below us lay many excellent trout and salmon waters (Oh, Boy, did I long to fish them!) but we left Wyman Lake and Bingham to "Dud" Dean, the popular character created by Arthur MacDougall in his fishing yarns. We did not pause long at Moosehead, either, despite the fact that some of the finest salmon, trout and togue fishing in the East is to be had on this immense body of water. We were, instead, anxious to reach those remote lakes, ponds and streams that are barely accessible to any but air travelers.

After filling our gas tanks at Greenville, we flew 40 miles over Moosehead past Rockwood, Mt. Kineo and on to Northeast Carry, then swung due east for Lobster Lake, a delightful trout pond with a small log lodge on its shore. Leaving the day's newspaper with the three people vacationing there, we took off again, flying over the West Branch of Penobscot River (trout and salmon stream), across Chesuncook Lake (with Duck Pond visible on the right), past Umhazooksus Lake, Mud Pond and over Chamberlain Lake.

We stopped at Chamberlain to call on Al Nugent and his wife. Al, host to big league ball players and the like in the fishing and hunting seasons, said: "Yes, there are plenty of trout in this lake. First fellow out in the morning can catch a few big ones right where that spring comes in." (He indicated a small trickle of water.) "Fish that run up to four pounds. Not like it used to be, but still pretty good."

It certainly sounded "good" to us. We made vows to visit this spot, come spring. (Continued on page 74)

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It's Fly Time

(Continued from page 39)

by Dee Vissing of Idaho Falls, Idaho is used by Clyde Ormond, the well-known author of hundreds of fishing stories for *Outdoor Life* and *Field and Stream*. Vissing calls his the Grey Nymph, but uses a muskrat-belly body, sparse grey hackle, and a badger-hair tail. Ormond has often taken his limit retrieving this one from a foot deep, but more often stops with a part-limit, preferring to leave the others to fight another day.

Basically there are said to be three types of flies—Wet Fly, Dry Fly, and Hair Fly. The last is just what the name implies—a

fly made with hair instead of feathers.

All flies have hackles except the hair fly. It is a "dead" fly, fished wet. Bodies of hair flies are made of braided horse-hair and the rest from buck-tails, Rock Chucks, Badgers, on what have you. For bass fishing you call them Hair Bugs. Bill fished these on Lake Mead last summer and caught lots of bass from one to 14 pounds in weight. He found them taking Goldens, Black-Gnats, White Millers, Guinea-Mallards, Yellow-Sallys, Buck-Tails, Helga-Bugs, Crickets, and Helgramites. In a river or lake it is common to fish these flies deep.

Stock items of Bill's fly kit are all kinds of waterfowl feathers, because they are waterproof and float—imperative for the fly-

hook's wings; an infinite variety of game bird feathers, including imported game birds from Indo-China and Africa and anywhere else they grow in bright and gaudy colors. He always pelts his pheasants in the fall, salts the pelt and cures it, thus having the whole riotous gamut of a China-bird's feathers from which to select tantalizing hues. For trout fly bodies he uses peacock herl or silk floss in myriad colors; also, chenille and gold and silver tinsel is well adapted to body-making. Every color of silk thread available is kept on hand, and waxed with beeswax before use. Hackles always vary in shade and Bill is ready to pluck any hen he sees with a new variation of hackle shade. You can go forever and never exhaust the limits.

With the big Salmon flies you use dyed hackles. Peacock feathers are used for the bodies of Grey Hackles, the Trout Fly, the Royal Coachman, the Coachman, and others. In western waters, be they lake or stream, these flies are reported to be killer-dillers.

Woolie Worm Technique

With a Woolie Worm to boot, you can hardly miss. It's the Woolie Worm that can be fished deep when the trout are far beneath the surface. If you suspect they are deep, cast the Woolie Worm as far out into the lake as you can—just as much line as you can heave. Then let it sink for about 20 slow counts. Then start to retrieve it in a series of quick, decisive jerks, . . . pause, jerk . . . pause, jerk . . . and when one of those old boys take it he's got it, and you've got him, too. Some of the biggest Lock-Laven, Rainbows and Native Cutthroats have been taken on No. 6 and No. 8 Woolie Worms. You call them in from the deep water weighing 7 and 8 pounds and up. This fly will catch trout the year around.

It imitates an insect that lives in the moss and weeds of lake bottoms and fish feed it as it rises to the surface. It can be used on hooks as big as No. 2 and as small as No. 10.

The hackles are good—Grey and Yellow-Bodied Grey. They pretend to be a nymph hatched from a rock-roller, a small insect that clings to the underside of rocks in creek bottoms rolled in fine, hard sand. Leaving this sandy shell they float to the surface and in this stage of metamorphosis are grey, or flecked with yellow.

Once on top of the water they cling to trailing limbs and twigs and drag themselves up into the sun, where they dry and proceed with their life cycle, eventually winding up with the air-borne infantry and known as the trout fly.

In all stages it is one of the best of the seasonal flies and one that Bill likes to tie on a No. 10 hook.

The Grey Hackle is started by winding waxed thread around the shank of the hook. Next the herl of a Peacock feather is wrapped around the shank and tied. Grey hackle is added, a dab of red tail feathers adjoined, and it's a tasty morsel for some fish's fancy. For the Yellow-Bodied Grey Hackle, Bill substitutes yellow silk floss for the herl. To complete the cycle on this insect in its final development, you use the peacock herl again for the body and shag it with a reddish brown hackle, topped off with two wings made from the white feather of a Teal duck, picking a section of the wing with a black dot in it. Anytime the fish are feeding in

(Continued on page 64)

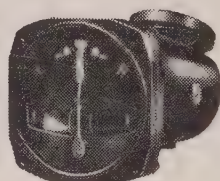
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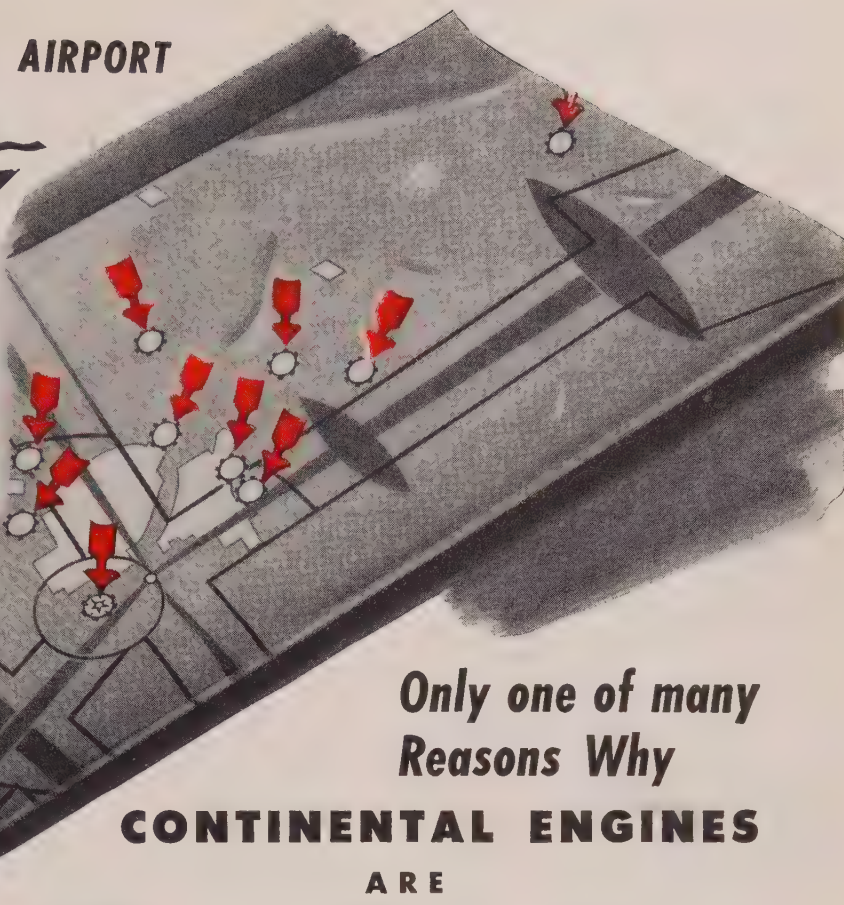
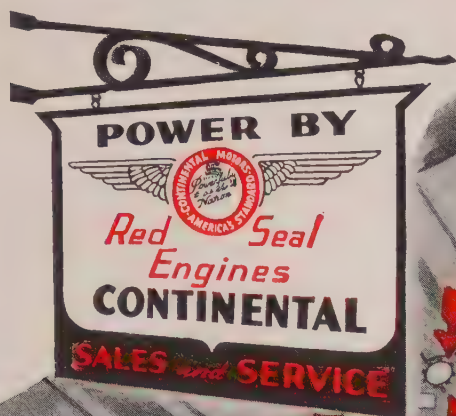
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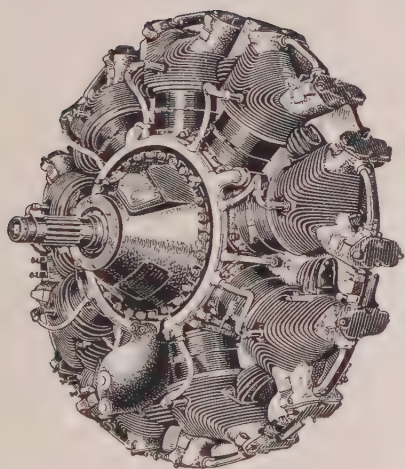


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It's Fly Time

(Continued from page 62)

the west during May, June or July, this formidable trio of flies will take fish. They can be made wet or dry; if wet, two wings; if dry, one wing.

However, Bill always checks a stream to see if the fish are feeding before he tries to feed them. It might take him an hour to find where they are lying and what they are striking.

His standard fly-book recommendations for western streams would include the Woolie Worm, the Hackles, the Trout Fly and the Ginger Quills, in three variations. He recommends several of each and never goes out without a dozen of his favorites. If you only have two Grey Hackles, you might miss a lot of fishing if a couple of big ones take your tackle right off.

To some extent a fly gets better after fish have roughed it up a bit. It looks more like a drowned what-ever-they-think-it-is.

Bill recommends a six-foot long tapered leader, as strong as you can get it. In recent years the Eagle Store at West Yellowstone, Montana has been the sole supplier for the west of the best of this kind of leader. You never use two flies on one leader—just one, that's enough if you are out to make an art of this master sport.

The kind of leader Bill likes best is the one they call "stump pullers." He says that with a fly like the Black Woolie Worm, you never know what your next cast is going to drag out of Jenny's Lake, or Henry's lake or any of the other famous western fishing waters that have produced 20- and 30-pound rainbows every year for the past half century, and 15 pounders regularly.

Last year a Woolie Worm on a No. 4 hook took a 22-pound rainbow from Henry's lake, right off the end of the mile-long graded runway.

Dependent upon the fly being fed, you'd fish with different sized hooks on different flies. For instance a Ginger Quill works nicely on a No. 8 or a No. 10 hook for wet-fly fishing. On one surprising occasion Bill Richardson got a 9-pound rainbow on a tiny No. 12 Ginger Quill hook. He always used a No. 12 or No. 16 when he has caught what he needs for camp food and wants to fish "just for fun," as a hook that small lets you lose your fish at will, and you seldom even have to take them from the water.

Sometimes you lose them anyhow—with fly, leader and all gone in a whisk. But a fish isn't really smart, no matter how wary he may be.

Once, on the Little Horse River in Montana a nice big energetic Native took away one of Bill's pet flies in the morning on his first cast, when he was still half asleep and his leader not yet soaked and pliable. Late that same day he came past the same hole with his two companions and remarked that he had lost a nice fish that morning, "right over there."

He had a duplicate fly on his line then—one of his own and never used before in those waters—so he made another cast at the same spot. The fish he caught on the first cast still had his other fly in its mouth.

He finds that fish tend to feed the same places to such a degree that if you flick a trout out of the water of a lake in the morning and lose him, he'll go down deep and sulk

a few hours, but later be apt to come back to the surface and start feeding again.

It is axiomatic that stream fish feed the same waters indefinitely, moving short distances up and down. Lake fish, however, will eventually cover their entire range.

If you see a big fish in a lair, and frighten him, the thing to do is go away and let him forget about it. Then, slip up from another angle, drop your fly in past his nose without exposing yourself and he'll be apt to take it with an explosive savagery that will startle as well as thrill you.

Don't scare them is the biggest rule of thumb. Keep out of sight and move slowly. Keep shadows and reflections off the water. Reflections spoil more fishing than anything else. Shiny belt buckles have caused many a man to eat bacon when he wanted trout.

If you keep shadows off, move slowly and don't jar the ground, nor splash the water, you can walk right up to a fish. Bill, and thousands of others, too, have caught fish between their legs after standing motionless for half an hour fishing a section of stream. If you do splash the water and scare them off, just be patient. If you are patient, then your career as a fly fisherman is made. Just stand still for 15 to 20 minutes and the fish will forget and come back to feed some more.

In running water, fish feed the riffles for the most part, and although you and me prefer fishing those beautiful deep eddies, old timers like Clyde Ormond and Bill Richardson like to get past the eddies and drop their lures in the shallows where they know the fish are feeding.

And though lake fish rove around restlessly, Bill has caught stream fish, tagged, out of holes where they were planted a year before.

One thing lots of people don't know about trout is that fish hardly ever, in fact—of their own choice—never, swim down stream. Scare them, yes, and they will flick off in all directions, but when they are feeding normally they head into the current at all times and if they have an urge to go downstream, they let the water carry them along, meanwhile still maintaining headway upstream.

This is the real reason a good fisherman always fishes upstream from his location, unless the stream is quite wide, and fish generally strike on the upper side of rocks instead of below them. Certainly everyone knows about the salmon spawning and what an uncanny sense of location a fish has.

One Man's Fly Rod

Bill uses a heavier than average rod—a 7-ounce rod about 7 and a half feet long. It isn't too heavy for nice fly casting and is still big enough to handle those 15- to 20-pound fish that you are bound to hit occasionally in western waters. He has caught 5-pound natives on a 3-ounce rod, but it's pretty light tackle.

He makes his own rods of Tonkin Cane, in three sections, using dull finishes and blackened ferrules that won't glint.

He likes a medium-weight, double-tapered line, with the tapered leader. Line can be either dull green or dark brown.

Your fly should be tied directly to the end of that leader—not connected by a short leader of its own in a couple of loops.

(Continued on page 66)



Visiting relatives several hundred miles away is an easy week-end round-trip flight for this Stinson Voyager owner and family.

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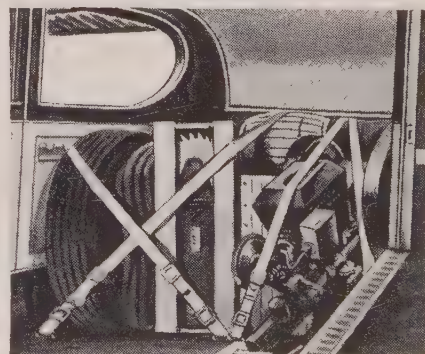
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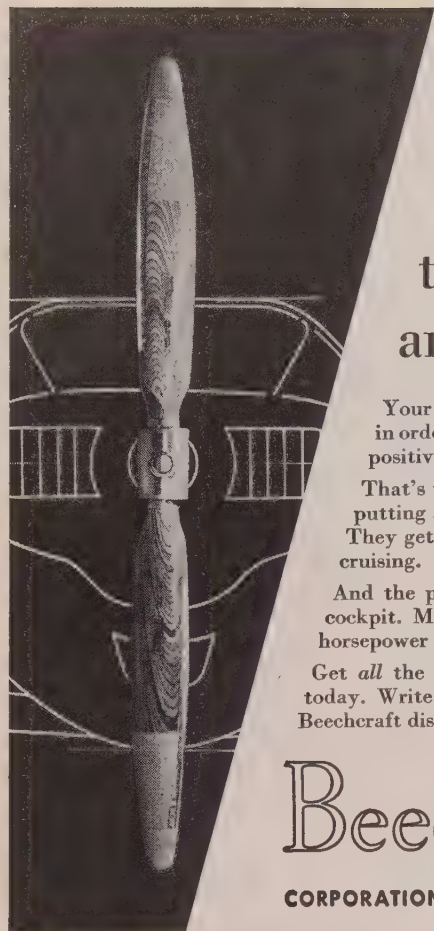
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It's Fly Time

(Continued from page 64)

It seems like most fishermen never learn this. The loop on your "store-boughten" fly leaves a little air bubble which is very noticeable to fish in light water. And like the human being, what old man fish ain't used to, he don't like.

Fishing a lake, you make a pretty nice cast some time and have your fly placed on top of the water a long way out there, and then not sink. An old timer like Bill, who wants a fish for supper, will just let that fly sit right there. He won't move it. The beginner might get impatient and cast it 20 times in two minutes. Bill just lets it "set." After a good two minutes have passed, he then undertakes to move that fly as little as possible—half an inch. This makes the tiniest imaginable rattle, as if the fly has just kicked one leg feebly. And Brother! until you've seen a disturbed fish hit a fly that has been moved that half-inch, and come booming out of the water in a clean two-foot high break, you've missed one of fishing's biggest surprises.

If they are not striking, or feeding, rather, you can annoy a fish into being caught. It takes more patience than the fish has got, but that's the fisherman's main credo—patience. If you've got it, you can make a trout so dad-blasted mad he'll hit a fly just to kill the pesky thing and make it quit annoying him.

You just coax 'em. Move the fly and let it sit still. Move it again, just a little. Let it be quiet. Then nudge it. After a while, bang, that big fish 15 feet down under will hit it just for fun.

You never want to get in a hurry to fish a stream, or move a fly on a lake. The trout aren't going anywhere—so wait for them.

After Grayling or Steelheads

One of the fastest sports known to man is fishing when the grayling are striking! There aren't many of these gamey, white meat, scaly fish, but where they abound, they abound, my friends, and back in 1910 some of the rivers near Yellowstone Park were so thick with them they looked like moss on the bottom. They are distinguished by a large dorsal fin full of rainbow colors and range from 10 to 22 inches long, being up to three and a half pounds in weight.

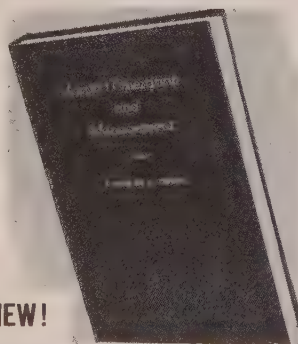
Some of the best fishing for them is in Ice Lake at Yellowstone. They are also found in the Gallatin River and the south fork of the Madison.

If you know a lake has grayling and you want to try them, cast your fly out into the water as far as you can. Let it sit there. If nothing happens in a couple of minutes go over to the river and catch some trout. You might see them by the thousand, but if they are not feeding your fly is helpless. If they are feeding—put a husky Trout Fly on your leader, or put a dozen of them on, if you've got a stout line, and every fly will snag a fish on every cast for the half-hour or so that the racket lasts.

You'll never get a better run for your money at anything.

Another off-breed western fish is the steelhead, called both trout and salmon by the natives but labeled a trout by Mr. Webster.

(Continued on page 70)



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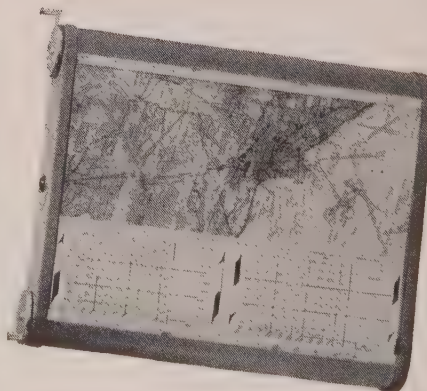
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The Edo 1400's have curved tops with deck rails, external keels and chines, "Speedo" hand-hole covers, resilient bow bumpers which are also removable, and a simplified gear. They are available through aircraft dealers and seaplane base operators. Ask your operator or dealer for details.

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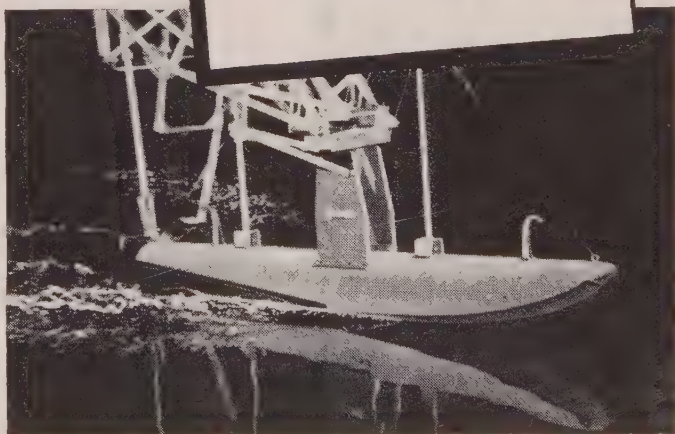
Aeronca Chiefs

★

Luscombe Silvaires

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Piper Cub Specials



In this experimental towing tank at the Stevens Institute of Technology a quarter-scale model of the Edo 1400 float is shown in a position just before take-off. Note the absence of spray. Towing tank tests gave accurate data on taxiing, take-offs and landings under all load conditions.

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Dilbert

(Continued from page 45)

to be then a properly "conditioned" pilot.

The success of this invention opens up an entirely new vista for aviation. A little thought on the subject shows that the possibilities are limited only by the number of different stimuli which can be administered to the pilot. I can foresee the day when the devices used for this purpose will be so numerous and effective that a properly "conditioned" pilot can just sit back and let them take charge of him, from take-off to landing. Whenever it becomes necessary for him to do anything, the appropriate stimulus will be automatically applied and the pilot's motor reflexes will cause him to respond with the correct action, without it being necessary for him to think at all.

This will usher in the Golden Age of aviation and will probably be known as the Era of the Automatic Pilot. Until this utopia arrives, however, flight safety will continue to be assured in only one way—"by the sweat of thy brow."

ENGINE BULLY—A test pilot was directed to take up a plane with a new engine for a run-in flight at low power. Shortly after take off he noticed a strong odor of gasoline which he mistook for cleaning fluid. Despite the possibility of leaking gas and his orders to make this flight at low power, the pilot started doing acrobatics when he reached 4,000 feet.

He made two snap rolls, then went into a loop. Before recovery from the latter was completed, however, smoke filled the cockpit and the pilot observed flames beneath his feet. That was the end of the flight; all the pilot had to do was bail out and limp back to the office.

Let's look at another case. This pilot was practicing take-offs and landings. After completing a few, he noticed his engine begin to heat up and detonate. Instead of flying around awhile to give it a chance to cool off, this Dilbert continued his landing practice without even bothering to open his cowl flaps. You know the result; the plane was washed out following the forced landing which occurred when the engine conked after the tenth take-off.

No wonder I explode when I run into such guys. They are *Engine Bullies*, pilots with weak minds and strong arms who know only one engine speed—"wide open."

Having cut my flight teeth on old-fashioned, temperamental engines, I'm a bug on engine care. Sure, modern engines are greatly improved, but they still have limitations. Each engine has its weak link; the part which lets go first when it is overstressed. Engines don't usually fail the minute they are mistreated and this makes pilots careless. But they do store it up. Failure is progressive and will probably occur some day when you least expect it.

Engine restrictions aren't designed as a handicap, but rather for your protection. Elaborate tests have shown that those are the limits of safe operation. And if you are smart, you will heed them. I know emergencies sometimes require engines to be operated in excess of prescribed limits. But don't make such excess your standard. Pour it on



when you have to get out of trouble, but get back into safe operating range the moment the emergency is over.

There is no sense in making flying any harder than it naturally is. You've got a lot of horses up ahead of you, but you have to know how to handle them to get the most out of them. You expect your engine to take you over a lot of rough terrain. So, pamper it!

MIXTURE CONTROL—Following a sudden drop in manifold pressure, an experienced pilot returned to the field for an emergency landing. His procedure was perfect. He notified the tower. He maintained sufficient altitude while circling the field to land from any position, if his engine cut out. He made a good approach and a perfect landing on the first half of the runway.

Despite perfect handling of the emergency up to this point, this pilot still cracked up. His 450-hp engine didn't throttle down below 1200 revs when he retarded the throttle for landing. He cut the ignition switch shortly after contact, but the engine continued running. Near the end of the runway, the pilot tried to groundloop, but his tailwheel was locked. He finally nosed over 300 feet beyond the end of the runway.

Too bad! But it was still his own fault. In the movies and comic strips the hero always "cuts his switch," but in the better informed aviation circles properly indoctrinated pilots always use the mixture control *first* and *then* the cut.

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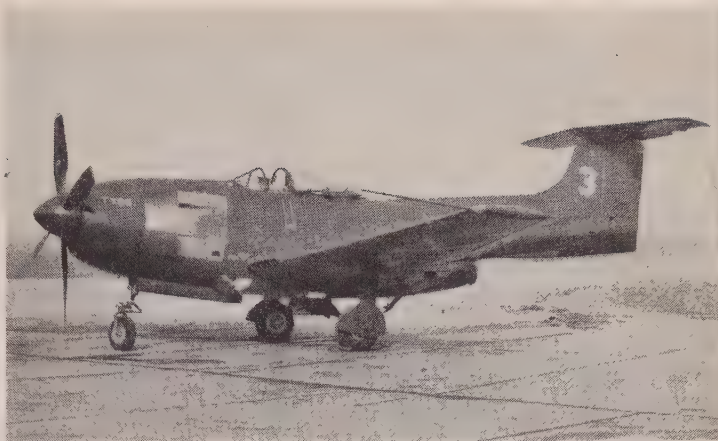
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CURTISS XF15C-1

One of the latest fighters to be delivered to the Naval Test Center at Patuxent River, Maryland, for experimental flight tests is this composite fighter, the XF15C-1. It is powered by Pratt & Whitney R-2800 in the nose and a British de Havilland H-1B turbojet, built by Allis-Chalmers, in the under part of the fuselage. Note this ship's "strange" tail assembly.



CHANCE VOUGHT XF6U

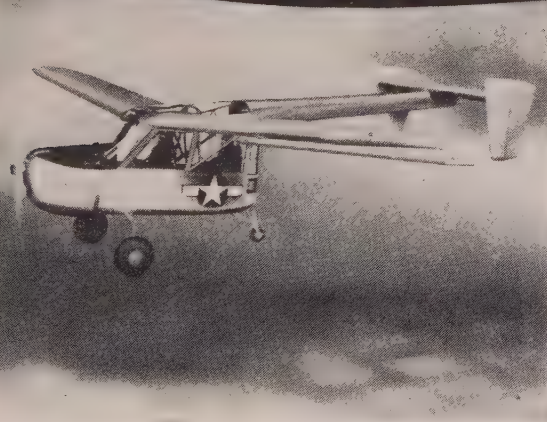
Now undergoing tests at Muroc Dry Lake, California, Navy's newest shipboard fighter, XF6U, is reported to have a speed "well over 500 mph." Powered by Westinghouse 24C turbojet of 2,700 lbs. thrust, *Pirate* is made of Metalite, new product providing mirror-smooth finish and reduction in weight. Test pilot is former Navy commander Ed Owen.



NEW... on the wing

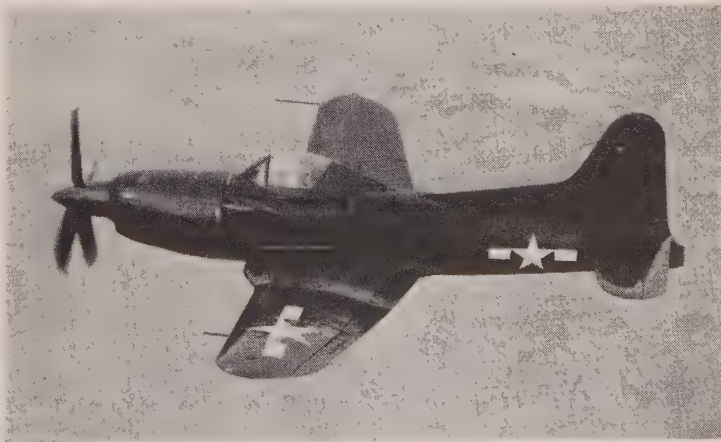
BOEING L-15A

Listed as one of the first specifically designed liaison planes, the all-metal L-15 is now in production at Boeing's Wichita plant. It is powered by 125-hp Lycoming engine, has a wing span of 40 feet, weighs 2,050 pounds. A feature of the L-15A is that it can be quickly disassembled by removing wings, boom and tail. Wheels can be turned inboard for stowage.



RYAN XF2R-1

A new shark-nosed Ryan has been developed for the Navy. This one is similar to the basic FR-1 *Fireball*, but it is powered by prop-jet (GE TG-100) in the nose. The jet engine in the tail is the same as powered the FR-1 (GE I-16). This all-jet combination gives the new "dark-shark" *Fireball* greater speed and climb. It is now undergoing Navy flight tests.



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It's Fly Time

(Continued from page 66)

This is a vicious fish when he's hungry. *

They run an average of 14 pounds in fast, ice cold mountain water in middle Idaho and will hit anything—red rags, spinners, flies, plugs, anything that irritates them . . . and they are born mad. They will hit a spinner again and again and again until they hook themselves.

Other western trout are the Mackinaw, a lake and river fish, with the Snake River in Idaho being a prominent source. They run from 10 to 36 inches in length and one taken near the headwaters of Jackson Lake in Western Wyoming weighed 37 pounds.

The Lock Laven or German Brown is a game baby from lakes and streams, running from 6 to 24 inches long and going up to 10 pounds occasionally. It has a very vicious mouth, with terrible teeth and any fisherman who has caught many of them in a day will have his hands cut all to hell retrieving his hooks.

One of the gamest of all fish anywhere is the Rainbow. Even smaller rivers like the Logan, in Utah have produced him up to 25 pounds, whereas records from British Columbia set 57 pounds as the biggest rainbow caught in those waters. They have come over 35 pounds from Jackson Lake.

Dolly Varden is another cold water fish that runs up to 14 pounds occasionally.

Eastern Brook have been planted in mountain streams and have been caught at 9 pounds occasionally.

The tyrant of the cold mountain rills is the Native or Cutthroat, every ounce in his 15-pound package a ton of finny dynamite.

As we said, before any season is out, a million new flies will have been tried. Any fisherman reading this will be sure to have one "sure-fire killer" that he feels is absolutely necessary for any kit of flies. We are bound, on any selection, to leave out at least one of everyman's favorite flies. But for an average round-up, these are the flies that seemed solid:

The Grey Hackle and the Yellow-Bodied Grey Hackle, the Trout Fly, the Ginger Quill and the Black Woolie Worm, all previously cataloged. Get them in hook sizes 2, 4, 6, 8, 10 and a few 12's.

Others are: Royal Coachman, Jock-Scot, Silver Doctor, Durham Ranger, Thunder and Lightning, Lemon Grey, Regal Scot, the Mormon Girl, the Black Gnat, the Red Ant, the Richardson Dude and the Richardson Yellowstone Gnat. Dee Vissing's Grey Nymph should also be included for western waters.

To this list every serious fisherman will have six or more additions of his own choosing. But if that group won't catch fish, most of us might as well go back to camp and feed the squirrels until they will.

Myself, I've always had the best luck with a grasshopper on a plain hook, but I ain't no fly fisherman.

You should have two good 6-foot leaders. Not less than two of each fly. A good medium-weight dark-colored line of tapered silk. A 7-ounce 7 and a half-foot rod with dull finish. A good reel should hold at least 30 yards of line. You can't use more than half that on most streams and a 75-foot cast is pretty good for natural control of your fly. A landing net should at least take a 6-pound

fish. Use boots, light ones, but not waders, please. Waders have drowned hundreds of people, literally.

If you are going into a lake in a boat, we recommend a kapok jacket that will keep you afloat. Every year people are done for because they "don't want to bother." Some bother, that—to have a life preserver when your boat's upside down.

A good pair of sun glasses are pleasant. Take all your patience along.

No whiskey! Fly fishing looks like a lazy man's sport, but in truth it is one of the most active and strenuous of all participant sports. You can get drunk hunting and shoot your friends, or perhaps a deer, but if you want some wet or dry fly fishing on a trout stream, you've no room for liquor.

For a week's trip, Bill likes to carry a light umbrella tent which is handy and easy to set up. A sleeping bag is lighter than bedding and handier. A gasoline stove is more convenient than an open fire.

You could carry all these in a lightplane like a Stinson Voyager, Piper Cruiser, North American Navion, and such, without crowding and still haul your friends off those mile-high airports in Idaho and Wyoming.

A good big coffee pot should be included along with a pan to wash dishes, and you'll need plates, cups and cutlery. With a frying pan then, about a foot in diameter, you can get by in nice shape for a week.

Try Target Fishing

After you pass the beginner's stage on dry flies, and can make a wet fly look like a nymph in the water, and want to shoot for keener "targets," you might try Clyde Ormond's favorite sport—fishing the lake rises.

This is strictly sharp-shooting, you call your fish by name and then catch him.

The procedure is to row a boat into the area where most rises of feeding fish are apt to, and do, occur. Two men make the ideal set-up, one to row and one to fish, changing off to share the sport. The boatman's job is important. He must be fast with the oars and equally noiseless. When a rise occurs, he must get the angler to within casting distance of the receding circles and "x-ring" without disturbance while the trout "named" is still within seeing distance of where the caster will lay down his fly. You see, it isn't blind casting at all, rather, it is specific casting to the particular rise of a particular trout. If the angler is too late, he must simply wait for another rise. It's impossible to predetermine where one will occur, as there's a lot of water around a lake trout. However, this makes for genuinely precise fly fishing, or it's no good at all.

Clyde Ormond and Dee Vissing have used this with great results on several lakes. Their choice of course is a lake wherein the giant rainbows work, not alone for their crazy, hog-wild rising at times, but for the aerial show they put on once they are hooked.

Another kind of precision fly fishing is dry-fishing with live trout flies. Yes, dry. It isn't a case of "thread on a trout fly, toss it in, and hope." It is done with a half dozen live orange-bellied trout flies—inch-and-one-half whoppers that come out in May.

Two or three are cast into a river by the ripples where a trout (rainbow) has jumped. If he gobbles them, he is marked down and a business cast is made to him, with the live fly impaled through the collarbutton,

on a tiny No. 10 dry fly hook, on a fine tapered leader. This, too, is precision fly fishing. The fly must be as delicately laid as the tiniest of dry flies, upon equally flimsy terminal tackle, and floated without drag over the rainbow's nose.

When this is done expertly, and the 2-pounder takes it in one explosive gulp! brother, you can forget a lot of home worries till you finally land him!

EDITOR'S NOTE: Author Arentz recently sent as a few more "Tips for the Fisherman" (this time the novice) offered by famed fly-man Bill Richardson.

1. Beginner should take up dry fly fishing first. It is easiest form of fly fishing.
2. A bulky, large-sized fly on a heavy hook

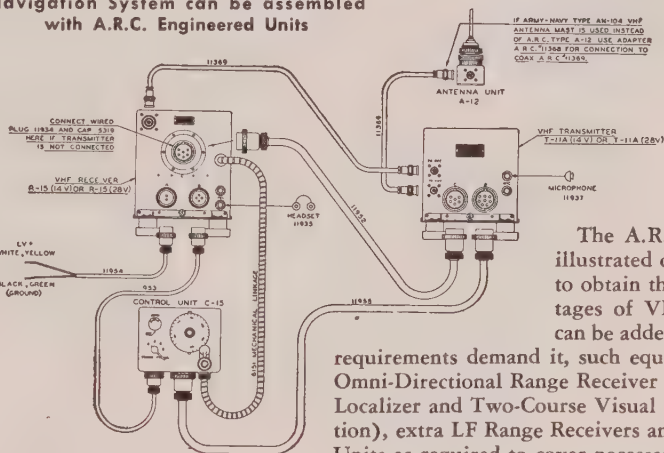
- should be used if water is fast or discolored.
3. Good fly rods are long-lived . . . and the most expensive rod is the cheapest in the long run. A good rod might cost \$50.
4. Keep fly lines free of dirt and grit, and in the winter they should be saturated with abalone and coiled loosely.
5. If you're fishing at night, use a dark fly against the lighter sky.
6. When fish are feeding on nymphs (larvae of all aquatic insects), fish wet below the surface of the water.
7. Because there may be 5,000 varieties of flies, don't think you have to have anywhere near all of them. Usually after trying many different flies, the fisherman will settle for a few favorites . . . and swear by and at them forever.



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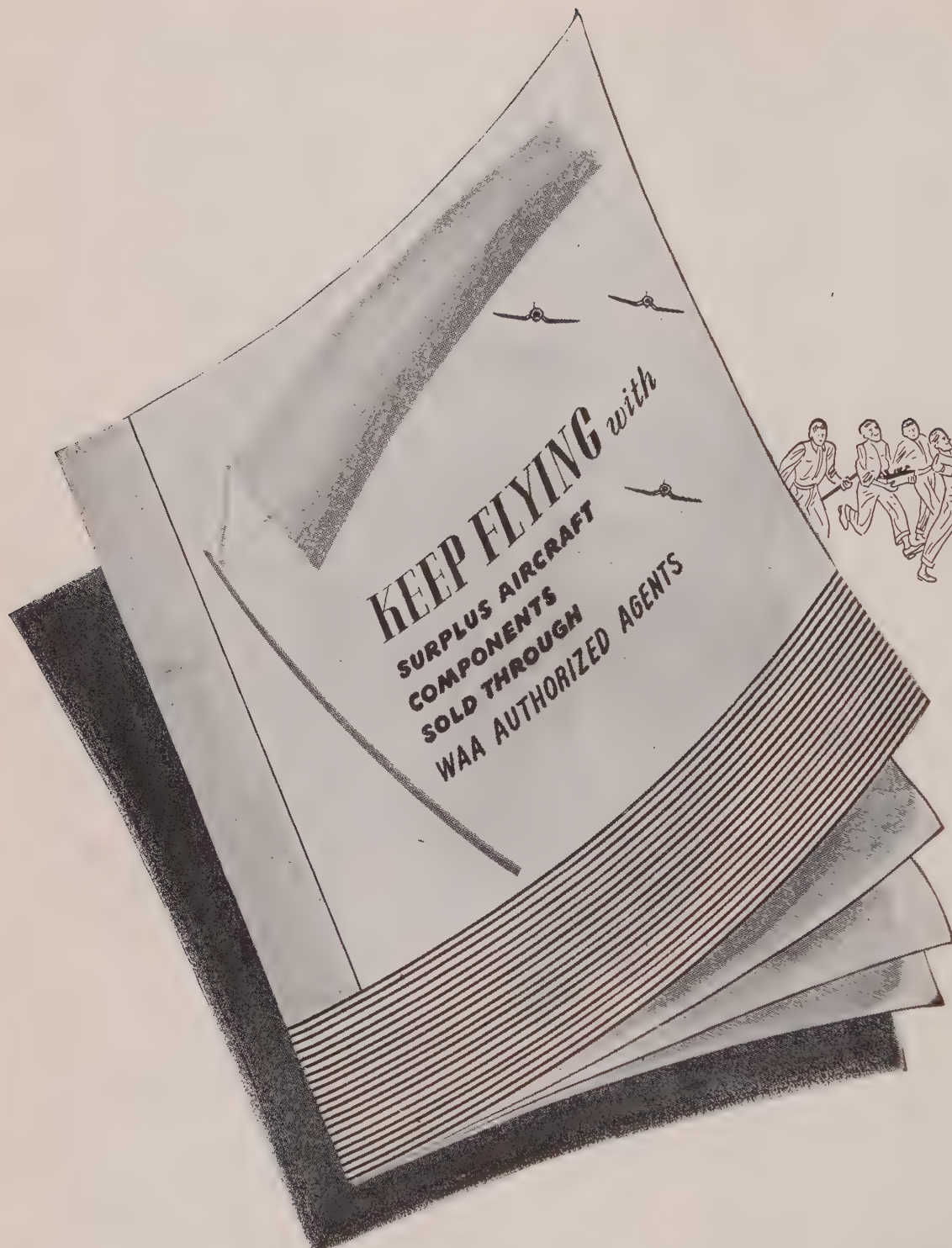
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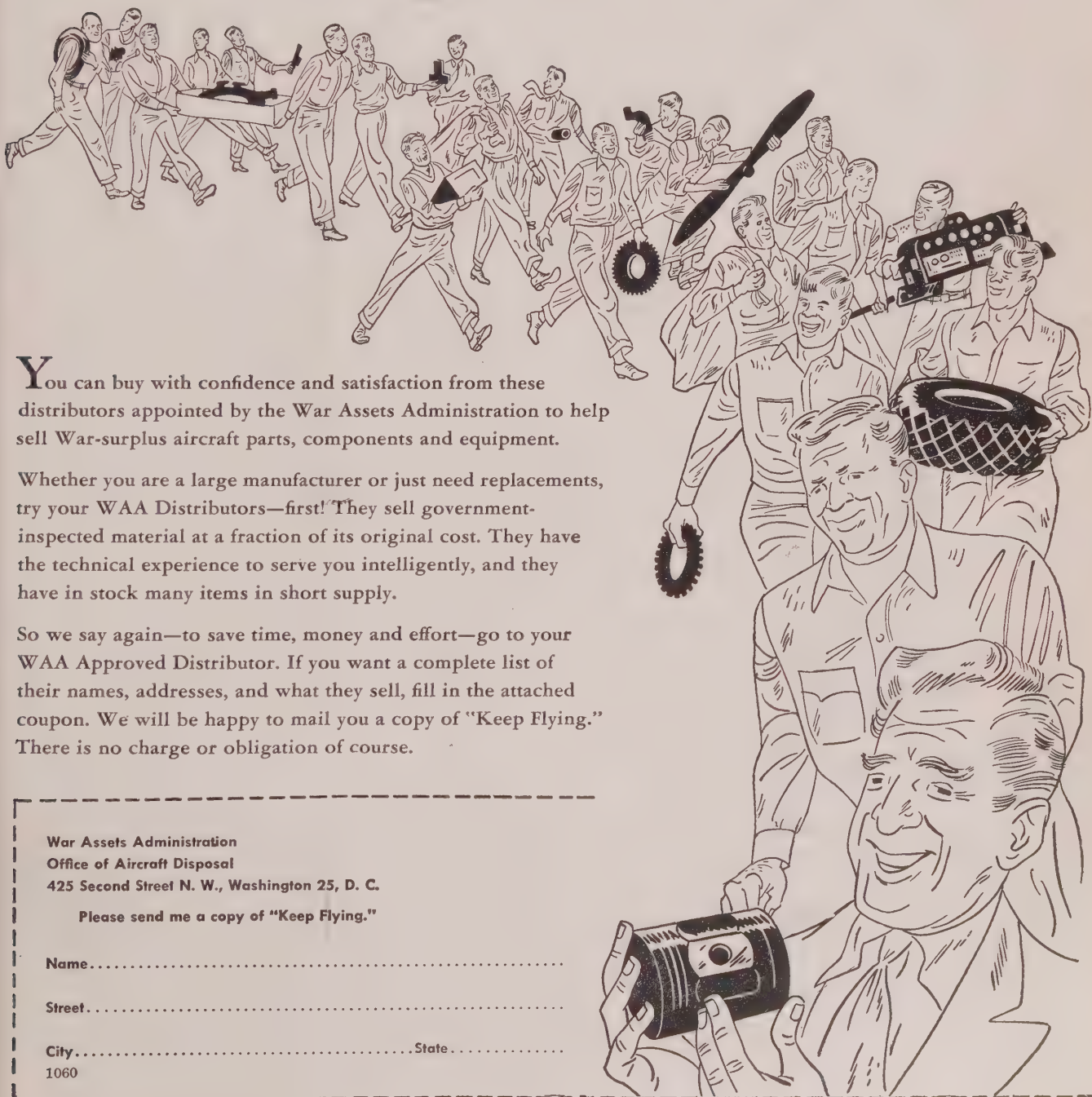


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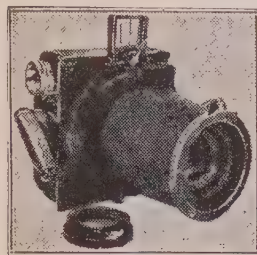
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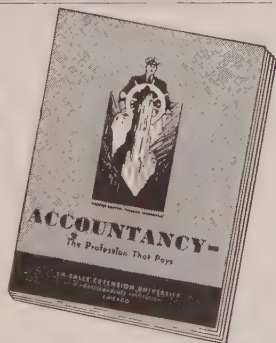
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Vanished Airman

(Continued from page 58)

should have been taken along by any person intending to set out on his own in that wild land. An emergency hand compass was left behind. This, however, might have been explained by the fact that friends say the lost pilot had a watch with a "compass in it." On the other hand, emergency supplies and mosquito nets lay undisturbed in the plane.

Following every clue, the guide found that the downed pilot had wandered up the small adjacent stream, where it was apparent that he saw a small trapper's lean-to on the opposite bank. Despite the fact that there was a solid and well-constructed beaver dam in plain view a few yards upstream, our pilot friend had waded waist deep through icy water to get to the opposite bank and had entered the lean-to. There is always food in such structures. There was no evidence that the pilot had either eaten or remained long in the rickety lean-to. The Indian followed his tracks like a hound after an unwary hare. The vanished pilot apparently walked ceaselessly, never pausing, never sauntering, but always walking hard, up and down stream, back and forth, in and out of the thick surrounding wilderness. Once only, on about the third or fourth day, he rested. Then he sat, for perhaps 15 minutes or less, leaning his back against a tree. Immediately thereafter he was up again, and walk, walk, walk while the searching planes hovered in the air miles to the north. At the end of the fourth day, he went downstream, where he found a second lean-to. From that time until the seventh day when his tracks came to a halt, he apparently covered the ground upstream and down between the two shacks.

On the morning of the eighth day, his plane was found—but he was gone.

In the weeks which followed, the cost of the search mounted to 40,000 U.S. dollars and an additional \$35,000 spent by the Canadian government. Despite trained men and tested methods of search and rescue, not a further clue was found. No shred of torn clothing, no remnant of food.

What became of him? Internal injury? No body was found and an internal injury surely would have killed him long before the seven days' walking ended. A raft downstream? Local opinion is that the stream is too narrow, too rocky, too shallow for such, nor does either of the two small settlements on the stream report even a log as coming down stream during the period. Was he picked up by friendly Indians or a remote trapper? Was he a victim of a grizzly bear? Always, the reply is—no evidence. Everywhere, there is nothing but a blank wall.

The case of the vanished airman is food for serious thought for any pilot who thinks he may soon—or ever—make the long trip up over the Highway. Other pilots should consider carefully before setting out in a slow, lightplane with limited range, limited speed and vulnerable fabric covering. And if go you must, obey the rules. Search-and-rescue is not a new science in the northwest, but the odds are against anyone who fails to follow the Highway and to stay by his plane if forced down. Failure to follow these basic rules may have cost the vanished airman his life. Is he, somehow, somewhere, still wandering in the wilderness? We can only sit and wonder.

Squaretails

(Continued from page 60)

Then we got into a network of trout and togue waters that have to be fished to be believed. Take a map of Maine and follow us over Allagash Lake, Eagle Lake, Churchill Lake, Chemquasabanticook Lake (which Maine residents call Ross Lake, for short), then on past Clayton Lake (where "Nine Mile Bridge" was written by "Curley" Hamlin's wife when this Maine schoolteacher and her warden-spouse wintered in the wilderness with only their sled dogs for company).

Go with us to Umsaskis Lake, Long Lake, over Allagash River to Round Pond. Picture the trout and togue that rarely are disturbed in scores of these ponds. (Trappers with a trawl containing 75 hooks were apprehended in this country last fall. They intended to live partly on fish through the beaver season.)

But now, however, it is getting late—too late for color photography—and we head for Portage to spend the night.

Beside us, and north, run the famous Fish River chain of lakes—Fish River Lake, Portage Lake, St. Froid Lake, Eagle Lake, Square Lake, Cross Lake, Mud Lake, and Long Lake. Record fish are taken here each season. Maine has a "One That Didn't Get Away Club" and squaretail trout weighing more than six pounds each have been taken in many of the waters we flew over. Since 1939, despite the war, 30-odd brook trout weighing: from six pounds apiece to eight-and-a-half pounds were caught in Maine; weighed officially and registered in this club.

On our return trip to Moosehead we crossed Big Machias Lake, Round Pond, Mooseleuk Lake, Munsungan Lake, Haymock Lake, Indian Lake and countless ponds, rivers and bogs—all containing fish that rarely are disturbed . . . and, Brother, you've never fished until you cast a line into such virgin waters!

Bill Turgeon, our pilot (. . . and a Frenchman), excitedly indicated many of these virgin waters by crying: "Tree-four-pound trout; right down there." (Bill knows. He stocks all inaccessible waters and has many chances to see big trout spawning on shallow gravel beds.)

It is monotonous to go on naming lake after lake, stream after stream. We flew over Telos, where Herb Penneck, one-time pitching great and currently general manager of the Phillies, shot his buck last fall. We saw the famous trout waters in the Katahdin region. And many, many more.

And there were great areas of the state which we hadn't even touched. Just as an example, Washington County comes to mind. There is an airport at Princeton, with a chain of lakes teeming with small-mouthed bass, landlocked salmon, pickerel, white perch, and panfish, within a mile of it. Grand Lake and West Lake, famous for their salmon, togue and squaretails, are in this area also. The airport, built by the government during the war and now used by flying sportsmen, boasts nearby camps with guides and transportation to and from the airport, just to make things easier for the flying sportsman. And this is just one example!

We came down on Moosehead convinced of one thing at least: there is fishing such as few ever experienced in the section we had flown over. We're going back there, come summer, by air.

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INTERESTED IN LATIN AMERICAN & FOREIGN EMPLOYMENT? \$1. brings 1947 FOREIGN SERVICE DIRECTORY listing Oil, Aviation, Mining, Transportation, Manufacturing, Construction concerns with FOREIGN INTERESTS and tips for IMMEDIATE APPLICATION. Global Reports, 6417 Homewood Ave., Dept. SS, Hollywood 28, California.

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SOUTHERN CALIFORNIA AIRPORT. (Sales, rentals, repairs and school.) Netting \$20,000 plus yearly. \$90,000 in government contracts 1947. Full price including planes, stock, etc. only \$47,500. ED GERHARDT, 802 E. Main, Ventura, Calif.

MISCELLANEOUS

AIRLINE BAGGAGE STICKERS, 6 different, 25¢ 18—\$1.00, 28—\$2.00. Airlabels Dep't. S, (Continued on page 78)

CLASSIFIED ADVERTISING

(Continued from page 77)

1145 St. Charles St., Villa Park, Illinois.

AIRCRAFT RESCUE TRAILERS for Conventional Automobile Hitch.
U. S. Aeroplane Carriers, Dover, Delaware.

AIRFIELD—Because of other business interests will sell at inventory an airfield now in operation with a GI program. This a proven money-maker with unlimited possibilities as it is near a community comprising some 500,000 people. SKYWAYS, Box #119.

B-G SPARK PLUG TESTER—Complete with Adaptors. Excellent condition, \$115.00. BEN KAPLAN, 1293 So. Cochran Avenue, Los Angeles 35, California.

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MAPLE SYRUP 100% pure. Somerset County's best. \$6.50 per gal. R. Blackburn, Somerset, Penna.

MUSEUM PIECE, complete, 1913 English Avro, model 504K Le Rhone Motor. Jared H. Gallup, R.F.D. #6, Norwich, Conn.

NEW ARMY SURPLUS. New 2-man mountain tents, nylon reversible at \$8.75, F.O.B., Boston. New Army 5-quart thermos jugs at \$5.00, F.O.B., Boston. Single Arctic sleeping bags with snap fasteners 40% down and 60% feathers at \$12.60. Longines-Wittnauer U. S. Army compass priced at \$2.00 each. New Seth Thomas eleven jeweled clocks at \$30.00. Send check or money order. Will ship express collect. Money back guarantee. Sorry no C.O.D.'s. J. B. Crawford, Inc., 157 Federal St., Boston, Massachusetts.

PROSPERITY ANALYSIS—If you want success, wealth & happiness, write me sending day, month and year born with \$2.00—your whole life can be changed. Danny Davis, Gen. Del., Miami, Fla.

THE SPORTSMAN PARADISE. Avoid heat and cold. Buy a recreation home. Utilities available. Airplane landing field under construction. Business and residence. Ocean View lots and acreage reasonable. J. C. Plankinton, Wakonda Beach, Waldport, Oregon.

SWAP Taylorcraft Coupe, Cont. A-40, licensed, for '46, '47 automobile. Howard Pidgeon, Wilmington, Ohio, R4.

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EX NAVY OFFICER has private license, is completing course for commercial license, wants flying job with a future. Single, 22, sober. College background, excellent references secured. All offers will be answered. John V. Holden, 119-27 145 St., South Ozone Park, New York.

FORMER ARMY PILOT—Airline ocean exp. (C-47s). Engineering Maint. Test Work in all types. Now employed as pilot; desire change to position with future for a reliable, presentable, and industrious pilot. 21, single, free to travel, new car. 1500 diversified hours, 1200 cert.; comm. single & multi land, Flight Instructor, 4 AAF Instrument Ratings, R-T license. Starting salary secondary. Interested in security and advancement commensurate with ability. SKYWAYS, Box #119.

FORMER ARMY PILOT, SALESMAN with twin-engine Cessna desires position with individual or organization full or part time. What do you have to offer? Robert Lenc, 142 11th St., Silvis, Illinois.

LICENSED A&E 31, veteran, married, 4½ yrs. experience on small, medium, and large aircraft. Desires position with airline, repair station or fixed base operator. George W. Cline, 12 "A" St., Fairfield, Ohio.

WANTED—Any position with airline. Area Hawaii, Jamaica, So. Calif. Experience 20 yrs. naval weather. Age 45, wife, son 10. Can accept within 6 mo. Address Weather Man, Box W, Elks Club, Honolulu, T. H.

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Where To Fly

(Continued from page 50)

spots. Query Monarch Air Lines, Inc., Stapleton Airfield, Denver 7, Colorado for more detailed data. A charter service based at Durango Municipal Airport, La Plata Flying Service is available for flights into or out of this sportsman's haven. A letter to them will bring you info regarding their service.

Out of Lamar, Colorado, charter flights are available via Arkansas Valley Aviation Co., Lamar Municipal Airport. Well stocked geese, duck and pheasant areas come within this company's range of operation.

If its skiing the sportsman wants, there's none better than that at Aspen or Steamboat Springs, Colorado. There are landing facilities at Aspen, but they're not too good in wintertime. A letter to Longmont Flying Service, Municipal Airport, Longmont, Colorado, will brief you regarding Aspen.

Personal Pilot Information:—

Sky-Ranch Airport (Denver)—(Cl. 3) EL. 5478 feet; 3 gravel flight strips, N/S; E/W; NW/SE. Navigation facilities: boundary day markers. Flood and obstruction lights. Runways marked. Wind cone, tee and tetrahedron. Hangar, control tower, major repairs; 73, 80, 91 Octane fuel. Storage. Station wagons to Denver, 12.6 miles E. (Denver Chart).

Durango Airport—(Cl. 2) EL. 6875 feet; earth-bladed strip, NNE/SSW. Wind cone. Obstructions: Mountains—E, NNE, W; Buildings—SSW. 8 hangars; major repairs; 80 Octane gas; Storage. Day and night service. Taxi service to Durango, 1.5 miles NE. (Trinidad Chart).

Granby Airport—(Cl. 1) EL. 8200 feet; turf strip, E/W; Navigation facilities: boundary day markers. Wind Cone. Obstructions: Telephone lines—E. Hangar; 73 and 83 Octane fuel. Day service. Private car to Granby, 1 mile ENE. (Cheyenne Chart).

Mecker Ranch Field (Gunnison)—(Cl. 2); EL. 8500 feet; gravel and sod strip, NW/SE. Obstructions: Buildings—S, Mountains—SE, SSW. Telephone service. No other data available. (Denver Chart).

Craig Municipal Airport—(Cl. 1) EL. 6300 feet; gravel strip E/W; 2 bare strips ENE/WSW, NW/SE; Navigation facilities: boundary day markers. Wind cone and tee. Obstructions: Trees—E, EW, SW, N; Pole line—S. Hangar; major repairs; 73, 80 Octane gas; Storage; Day Service. Private car to town, 1.8 miles SE. (Cheyenne Chart).

Rifle Airport—(Cl. 2) EL. 5400 feet; sand, earth and sod strip, E/W; sand, clay and loam strip NW/SE; Wind cone. Obstructions: Tele. lines—E, Hill—SW. 73 Octane gas. Car to town, 3 miles E. (Denver Chart).

Salida Municipal Airport—(Cl. 1) EL. 7500 feet; 4 clay and gravel strips, E/W, WNW/ESE, WSW/ENE, SW/NE. Obstructions: Trees—W, WNW; Trees and buildings—E, ESE; Telephone poles—W, WNW. Hangar.

(Continued on page 80)

Air-Minded Executive

(Continued from page 52)

said, "this is the only way to cover meetings across the nation. We did as much in three days as we would have done in a month or two by regular transportation."

Three planes (two Beechcrafts and a *Lodestar*) are operated on a seven-day, night-and-day basis, by the Goodyear Tire and Rubber Company in Akron, Ohio, for its ranking executives. Since inauguration of the executive service in mid-1944, the Goodyear records show that the planes have traveled 350,000 miles without accident.

As in other companies which own executive planes, Goodyear permits no compromise with safety factors. Pilots have first, last and only say whether a scheduled flight shall be made. While airline flight and maintenance procedures are followed, cancellation or delay of scheduled trips due to weather or mechanical difficulties has been far less than one per cent.

Goodyear's flight operations has a staff of six experienced pilots, one of them a World War II Marine Corps Ace who shot down 20 Jap planes, and an operation and maintenance personnel of eight. Four pilots are kept on duty and two on stand-by status at all times.

Goodyear decided to purchase its first executive plane during the war when train and flight spaces on commercial lines were at a premium and higher priorities were likely to leave anyone stranded in the midst of his travels. Begun as an experiment, the executive flight service soon proved its worth in carrying officials on trips to Goodyear's 20 plants in 12 different states and its four plants in Canada and Mexico.

"Here's an example," says E. J. Thomas, Goodyear president. "We have important manufacturing operations in the Southwest and California—tires, synthetic rubber, cotton and pre-fabricated housing. We can fly to Phoenix in nine or 10 hours, transact our business, perhaps go on to the Coast, and still be back in Akron in less time than formerly required to travel one way."

"We are able to get more work done by cutting down on traveling time. Also, most business problems have several phases; manufacturing, sales, engineering, finance. The seating capacity of our planes enables us to take enough men along to survey problems from all angles, discuss the program on the way and the conclusions on the return trip."

"Goodyear has always been a large user of trains and airliners and will always be;

but sometimes I wonder how we were able to operate before we got our own ships."

Not long ago a prominent businessman said, "I like the executive plane. It gets me places in a hurry and it gets me back to my office in a hurry. I get more things done. Now if it only had a telephone so I could talk to my office or plants when I'm in the sky, I could get a lot more done."

And within the next year or so that executive, and a lot more, are going to have their telephones—and get more things done.

A plane-to-ground telephone service has been installed by the Hercules Powder Company of Wilmington, Del., in its *Lodestar* plane—and other companies are watching the tests with keen interest.

Bendix Aviation Corporation, developers of the system, points out that "this new form of airground telephone communications will open a new field of dependable and efficient voice contact from executive and private planes, while in flight, to practically any point having telephone service."

The working principle behind it is gearing airborne radio to frequencies used in ship-to-shore communication service maintained by telephone companies. The plane will call the ship-to-shore station through which calls will be transmitted to central telephone offices from where they will be relayed to other ground telephones using the conventional long-distance system.

The late President Roosevelt found his specially equipped executive plane a great aid in getting about the world during the war—and President Truman is giving his private plane plenty of use, too. Douglas is at present building, in great secrecy, a presidential plane which is reported to be just about the last word in sky transportation.

The highroad of the skies is one of the main roads for business these days.

The private railway cars of the nation's great gather dust and rust. Yet it seems only yesterday that nearly every small boy who lived near a railroad dreamed of someday owning his own private rail car.

I was thinking of this boyish dream the other day when I caught sight of a youngster standing just outside of the gate of our airport where several companies have their private planes.

"What are you doing, son?" I asked.

"Just watching," he said. "Because when I grow up and own the mill in town, I am going to have my own ship, too—but it won't be an airplane. No, sir, it will be a rocket ship all my own."

And I couldn't help saying, "I guess you're right, sonny."



SKYWAYS PICTURE CREDITS

COVER—This is the popular North American *Navion*, a four-place plane that is enjoying popularity with the flying sportsmen of today. It is all metal, has a 500-mile range and speed of 150 mph.

Following list gives source of SKYWAYS' pictures

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Announcement

Our Aeronautical Training Division announces its first class for Flight Engineers beginning April 7th. The purpose of this course is two-fold: first to prepare qualified applicants for the new Civil Aeronautics Board Flight Engineer License Test. Second, to give the theoretical training needed to carry on practical work of the Flight Engineer, such as will be expected by the Agencies seeking his services. This class will have the advantage of the experienced personnel and teaching staff of the Pan-American Navigation Service.

Chief Instructor in charge of the Flight Engineers Division is E. J. Demas, B.Sc. and A.E.: flight engineer in foreign and U. S. service, and three Byrd Polar Expeditions; Asst. Chief Flight Engineer, Lockheed Aircraft Corporation.

Applicants desiring to enroll should make an early decision as the number to be accepted is limited. Address, Registrar, Flight Engineer Division.

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Pilots

... Don't Miss

"Try Beach Landings"

by William A. Price

Here's a pilot who offers tips on how to have fun with your light plane this summer ... go on a flying beach party!

SKYWAYS

June Issue

Where to Fly

(Continued from page 78)

Private car to town, 4 miles W. (Denver Chart).

Steamboat Springs—(Cl. 1) El. 6700 feet; 2 clay, loam and sod strips, NNE/SSW, NW/SE. Obstructions: Houses—NE; Ridge—SW; Hills—N, E, S. Private car to town, 2.3 miles NNW. (Cheyenne Chart).

Kelsey Field (Lamar)—(Cl. 2) El. 3673 feet; 3 earth and sod strips, N/S, E/W, NE/SW; Navigation facilities: rotating beacon, course, boundary, range and obstruction lights; boundary day markers. Name on hangar; circle on field. Lighted wind cone. Hangar, weather bureau; 73 Octane gas; Storage; Day service. (Denver Chart).

Delaware

The state of Delaware may be small in size but its variety of outdoor activities makes it a big state to sportsmen. At Lewes, Delaware, the angler enjoys fishing for sea bass, croakers, rock, trout, flounder and blues in the Indian River Inlet. Sailboats and cruisers are available for hire, too. In the hunting category, Sussex County with its game birds, fox hunting, trapping, rabbits and squirrels provides the flying sportsman plenty of chance to bag whatever he's partial to. Aircrafters, Inc., operating out of Rehoboth Airport, will fly you to any of a dozen good hunting and fishing locations.

Airline travelers, coming by way of Washington on TWA, American, Eastern, United, PCA or Colonial, will be ferried to Rehoboth by Aircrafters at a reasonable charter rate. Contact Aircrafters for additional data. Hotels and rooming houses are available.

Personal Pilot Information:—

Rehoboth Aircrafters Airport—(Cl. 2) El. 10 feet; 5 sod flight strips, N/S, ENE/WSW, E/W NW/SE, WNW/ESE. Wind cone. Obstructions: Trees—SE, N, NE; Pole line—W; Buildings—SW, NW. 3 hangars; weather bureau; major repairs. 80, 91 Octane fuel; Storage; Day service. Bus or taxi to town, 2.5 miles W. (Washington Chart).

Illinois

The city of Chicago might well be called the gateway to the fertile hunting and fishing grounds of the Northwest. Sportsmen arriving in Chicago via United, Eastern, Chicago & Southern, PCA, American, TWA, Northwest and Delta Airlines can be flown by charter services to the north woods of Michigan, Wisconsin, Minnesota and Canada's Ontario where true stories of fishing and hunting read more like John Bunyan tales. Trans-American Airlines, a non-scheduled air carrier operating out of Chicago, are specialists in flying sportsmen to these well-known hunting and fishing areas. If you want more detailed information or an aerial hunting or fishing trip planned for you, write Trans-American Airlines, 224 South Michigan Avenue, Chicago 4, Ill. If its angling for the big ones that you like—muskie, bass, etc., Consumers Airlines, Inc., operating out of Champaign, Illinois, will fly you to Rhinelander, Wisconsin, where the big ones are the rule not the exception. Good hotels and lodges are available here at reasonable cost. Another spot is Kenora, Canada, a muskie, bass and trout fishing paradise. In the fall season, hunters fly to Kenora for moose, deer, bear, elk and wildcat hunting. Also on the "route" of Consumers Airlines, Inc., is Canova (near Mitchell), S. Dakota. The Canova Hunting Lodge offers excellent facilities.

Personal Pilot Information:—

Rhineland (Wis.) Municipal Airport—(Cl. 2) El. 1598 feet; 2 turf strips, NE/SW and NW/SE. Navigation facilities: boundary day markers. Wind cone. Obstructions: Bank—NE; Trees—SE, SW, NW. Hangar, 80 Octane gas; Storage. Taxi or private car to city, 2 miles W. (Green Bay Chart).

Rhineland Seaplane Anchorage—On city waterfront in Boom Lake.—El. 1525 feet. Servicing from airport (above).

Anderson Airport (Mitchell, S. Dak.)—(Cl. 2) El. 1293 feet; 3 turf strips: N/S, ENE/WSW, NW/SE. Wind cone. Obstructions: Poles—SE, NW, SW, S, N; Trees—SE, SW. 3 hangars; Major repairs; 80 Octane gas, Storage, 24-hr. service. Lunchroom on field. Taxi service to city, 2.7 miles W. (Sioux City Chart).



AIR TRAVEL—From forest trail (Canada) to air trail came Joe and Morris La Famme with two moose and a fawn for display in New York's Grand Central Palace